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ABSTRACT

Similarities and differences between adult and traditional-aged students were analyzed based on a survey of 13 cohorts of first-year college freshmen. A sample of 172,400 first-year students over the age of 21 who responded to the Cooperative Institutional Research Program's freshman survey between 1966 and 1978 was compared to a nationally representative sample of traditional-aged students. The analysis considered the following areas: demographics, college choice, the financing of college education, preparation for college, college plans, and life goals. The following demographic characteristics of respondents were considered: enrollment status, age, sex, race, marital status, number of children, and father's and mother's educational attainment. Generally, the greatest concentration of adults was found in the two-year colleges, particulary those that are publicly controlled. Reasons for the student's selection of the college they attended included the institution's quality, and at times, job-related training and cost. Students' concern for financing their college education was considered in relation to demographic characteristics, field of study, and type of institution attended. The extent of preparation offered in high school, the need for remedial help, high school grade point average, living arrangements while attending college, degree aspirations, probable major, and probable career after college were assessed. Additionally, social, family, business, and personal life goals of respondents were evaluated. Implications of the study findings and results of additional study of a subsample of the respondents are considered. A bibliography is included. (SW)

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The Characteristics and Needs of Adults in Postsecondary Education

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Los Angeles, California

May 31, 1980

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Finally, one of us would like to pay special tribute to Vicki R. Solmon, J.D., who has been successful both as a traditional college student, and as an adult who returned to law school. Her travails as an

adult woman student made at least one of us sensitive to the issues discussed in this report, and provided concrete examples of the barriers faced by many thousands of her counterparts.

Some of those who have provided inputs for this study may not be completely satisfied with the product. Unfortunately, data were not available to enable us to address all the issues which should have been raised in a study of adults in college. Hopefully, this book is only a beginning. And all errors of omission as well as those of commission are the responsibility of the authors.

LCS

JJG

Los Angeles, June, 1980

TABLE OF CONTENTS

		Page
	List of Tables	
Chapter I	Introduction	1
Chapter II	Demograhics	14
Chapter III	College Choice	29
Chapter IV	Financing of College Education	40
Chapter V	Preparation for College	55
Chapter VI	College Plans	62
Chapter VII	Life Goals	71
Chapter VIII	Implications of the Study	83
	Appendix A	
	Appendix B	
	References	

List of Tables

Table 1	Comparison of Norms Participants and Number of Freshmen in the CIRP Data Base Who are Age 21, by Survey Year
Table 2	Enrollment Status of Adult Respondents, by Year and Sex
Table 3	Enrollment Status of Adult Respondents, by Year and Institutional Type
Table 4	Enrollment Status of Adult Respondents, for All Institutions, by Year
Table 5	Ages of Adult Respondents, by Year
Table 6	Distribution of Adult Men and Women, for All Institutions, by Year
Table 7	Percent of Adults Over Age 25, by Year and Sex
Table 8	Institutional Type and Enrollment Status of Adult Respondents, by Year and Sex
Table 9	Racial Background, for All Institutions, by Year and Student Type (Traditional and Adult)
Table 10	Racial Background of Adult Respondents, for Institutional Type, by Sex and Year
Table 11	Racial Background, for All Institutions, by Year, Sex and Student Type (Traditional and Adult)
Table 12	Enrollment Status of Adult Respondents, by Year and Racial Background
Table 13	Characteristics of Adult Respondents, by Marital Status
Table 14	Adult and Traditional Students in Postsecondary Education, by Year and Institutional Type
Table 15	Choice of College, for All Institutions, by Year and Student Type (Traditional and Adult)
Table 16	Reasons Noted as "Very Important" in Selecting This College, for All Institutions, by Year and Student Type (Traditional and Adult)
Table 17	Reasons Noted as "Very Important" in Selecting Type of College (for 1978 Traditional and Adult Students)

Table 18 Reasons Noted as "Very Important" in Selecting This Particular College, for Adult Respondents, by Enrollment Status and Year

Table 19 Financial Concerns of Respondents, for All Institutions, by Year and Student Type (Traditional and Adult)

Table 20 Correlates with Concern with Ability to Finance College Education

Table 21 Source of Financing First Year of College, for All Institutions, by Year and Student Type (Traditional and Adult)

Table 22 Source of Financing College Education for Adult Respondents, for All Institutions, by Year

Table 23 Type of High School Program, for All Institutions, by Year and Student Type (Traditional and Adult)

Table 24 "Poor Curriculum Preparation at My High School" for Adult Respondents, for All Institutions, by Year

Table 25 "Perceived Need for Tutoring", for All Institutions, by Year and Student Type (Traditional and Adult)

Table 26 High School Grade Point Average, for All Institutions, by Year and Student Type (Traditional and Adult)

Table 27 Year Adult and Traditional Respondents Graduated from High School, for All Institutions, by Year

Table 28a Courses Taken by Adult Respondents at Any Other Institution, by Enrollment Status and Year

Table 28b Courses Taken for Credit by Adult Respondents at This Institution, by Enrollment Status and Year

Table 29 Distance from Home to College of Adult Respondents, by Year and Sex

Table 30 Miles from Home and Where Plan to Live Next Fall, for All Institutions, by Year and Student Type (Traditional and Adult)

Table 31 Living Arrangements of Adult Respondents, by Enrollment Status and Year

Table 32 Highest Degree Planned Anywhere, for All Institutions, by Year and Student Type (Traditional and Adult)

Table 33 Highest Degree Planned for Adult Respondents, by Institutional Type and Year

Table 34 Highest Degree Planned for Adult Respondents, by Enrollment Status and Year

Table 35 Marital Status of Adult Respondents, by Highest Degree Planned and Year

Table 36 Probable Major, for All Institutions, by Year and Student Type (Traditional and Adult)

Table 37 Probable Major for 1978 Adult Respondents, by Institutional Type

Table 38 Probable Major of Adult Respondents, by Enrollment Status and Year

Table 39 Probable Career Occupation, for All Institutions, by Year and Student Type (Traditional and Adult)

Table 40 Probable Career Occupation of Adult Respondents, by Enrollment Status and Year

Table 41 Objectives Considered to be "Essential" or "Very Important", for All Institutions, by Year and Student Type (Traditional and Adult)

Table 42 Correlates with Life Goals

Table 43 Objectives Considered by Adult Respondents to be "Essential" or "Very Important", by Employment Status and Year

Table A-1 Reasons Noted by Adult Male Respondents as "Very Important" in Selecting This College, by Marital Status, Year and Sex

Table A-2 Reasons Noted by Adult Female Respondents as "Very Important" in Selecting This College, by Marital Status, Year and Sex

Table A-3 Financial Concern of Adult Respondents, by Marital Status and Year

Table A-4 Financial Concern of Adult Respondents, by Year and Enrollment Status

Table A-5 Source of First Year's Educational Expenses for White Adult Respondents, by Institutional Type and Year

Table A-6 Source of First Year's Educational Expenses for Black Adult Respondents, by Institutional Type and Year

Table A-7 Source of First Year's Educational Expenses for "Other" Adult Respondents, by Institutional Type and Year

Table A-8 Source of First Year's Educational Expenses of Adult Respondents, by Year and Enrollment Status

Table A-9 Source of First Year's Educational Expenses for Adult Respondents, by Marital Status and Year

Table A-10 Source of First Year's Educational Expenses for Male Adult Respondents, by Marital Status and Year

Table A-11 Source of First Year's Educational Expenses for Female Adult Respondents, by Marital Status and Year

Table A-12 Source of First Year's Educational Expenses for Adult Respondents, by Father's Educational Attainment and Year

Table A-13 Marital Status of Adult Respondents, by Probable Major and Year

Table B-1 Very Important Factors in Decision to Attend College, by Age

Table B-2 Tuition of 1970 Freshman College, by Age

Table B-3 Highest Degree Planned When Entered College, by Highest Degree Held in 1977, and Age

Table B-4 Very Important Factors in Selecting Undergraduate Major as Reported in 1977, by Age

Table B-5 Types of College Counseling Received, by Age

Table B-6 Satisfaction with Types of College Counseling Received, by Age

Table B-7 Whether or Not 1970 College was the Same as the Last College Attended, by Age

Table B-8 Satisfaction with Colleges Attended, by Age

Table B-9 Usefulness of a College Education, by Age

Table B-10 Attitudes Toward the Statement, "The Chief Benefit of a College Education is That it Increases One's Earning Power", by Age

Table B-11 Change in Attitude from 1970 to 1977 Toward the Statement, "The Chief Benefit of a College Education is That it Increases One's Earning Power", by Age

Table B-12 Changes Would Make if Considering College Today (With Present Experience and Knowledge), by Age

Table B-13 Employment While in College, by Age

Table B-14 When Made Career Choice, by Age

Table B-15 Job Search Methods That Worked in Getting Current or Most Recent Job, by Age and Full-time Employment Status

Table B-16 Current Occupation, by Age and Full-time Employment Status

Table B-17 Relation of Current or Most Recent Job to Undergraduate Major, by Age and Full-time Employment Status

Table B-18 Reasons Working in a Job Only Somewhat or Not Related to Undergraduate Major, by Age and Full-time Employment Status

Table B-19 Extent of Contribution of Various Experiences to Current or Most Recent Job, by Age and Full-time Employment Status

Table B-20 Job Characteristics, by Age and Full-time Employment Status

Table B-21 Current Annual Income Before Taxes, by Age and Full-time Employment Status

Table B-22 Attitudes Toward Work, by Age and Full-time Employment Status

Table B-23 Perceptions of Underemployment, by Age and Full-time Employment Status

Table B-24 Satisfaction with Current of Most Recent Job, by Age and Full-time Employment Status

Table B-25 Whether or Not Working in a Preferred Occupation, by Age and Full-time Employment Status

Table B-26 Degree of Satisfaction with Various Aspects of Current or Most Recent Job, by Age and Full-time Employment Status

Table B-27 Career Plans, by Age and Full-time Employment Status

Table B-28 Change in Career Plans, by Age and Full-time Employment Status

Table B-29 Satisfaction with Various Aspects of Life, by Age

Chapter I

Introduction

A major issue for colleges and universities today is whether or not accelerated enrollment rates of entering or re-entering adults (those over 21 years of age) can or will compensate for the projected enrollment declines of the traditional-aged college attenders (the 18-to-21-year-olds). The issue involves not only whether there are sufficient numbers of adults to fill the empty seats, but also whether the adults' educational needs can be met by institutions originally set up to educate younger students. Many scholars interested in adult access to postsecondary education have commented on this issue.

> Whether sufficient millions of adults will be forthcoming to offset the expected enrollment decline among 18 to 21 year-olds is problematic. Thus far, the large majority of adults is enrolling in non-degree programs taught by faculty below the doctoral level in community colleges. This new audience may not prove an adequate substitute for full-time undergraduates of traditional age and with traditional degree interests. (Cartter & Solmon, 1976, p. 38)

If adults are turning to non-degree programs in community colleges, traditional colleges and universities may not be adequately meeting their needs and change may be required.

Others believe that the traditional educational system may be flexible enough in its present state to accommodate adult students (Church, 1978; Eldred and Marienau, 1979). Harrington (1977) says "The historical record shows that fitting adults into the academic pattern does not require a complete--and therefore disturbing or impossible--transformation of postsecondary education and its values" (p. 10). So far, very little information has been available to help us clarify this issue.

The existing literature reflects the problem which the lack of meaningful data raises for researchers. Even though there is a sizable amount of literature on adults in higher education, particularly with respect to the evening college movement studied during the 1950s, they are somewhat outdated. Much of the relatively recent literature refers to developmental aspects of adult learning (Knox, 1977) or to the problems of accommodating the very elderly on campus (Weinstock, 1978). Noticeably absent from the materials are adequate descriptions of major trends in adult postsecondary education. Even when this information is available, it is national in scope and offers little guidance to administrators in traditional programs who are concerned with adult needs at the local level (Kuh & Ardaiolo, 1979; Arbeiter, 1977). Also, the tendency to aggregate the different groups of adult learners, i.e., full-time and part-time, and degree-seeking and noncredit students, obscures the actual number of potential learners in various groups (Kuh & Ardaiolo, 1979).

The various definitions of adult students in the existing literature makes it exceedingly difficult to utilize in a comparative sense information that would otherwise be appropriate. Much of the literature takes an age cut-off approach: An adult or nontraditional student in higher education is distinguished from his traditional counterpart merely by his age regardless of educational status. The traditional college-aged student usually is defined to include only 18-to-22-year-olds. Therefore, nontraditional students are those over age 22 (Harrington, 1977; Schlaver, 1977; Shulman, 1976; Rossmann, 1979).

Another distinction is based on type of educational participation rather than, or in addition to, age. Basic differentiations are made between full-time and part-time students, between degree and non-degree students, or according to the setting where the education is obtained. The Indiana Commission for Higher Education (1979) is one of the few organizations to allow students 17 or older to be classified as adults for educational purposes (Anderson & Darkenwald, 1979). That is, students of what is normally considered traditional college-going age may be viewed as adults, depending upon the nature of their participation.

The National Center for Education Statistics (NCES) distinguishes between "adult education" and "adults in education." Adult education refers to "organized learning to meet the unique needs of persons beyond compulsory school age who have terminated or interrupted their formal schooling" (NCES, 1978a). "Courses taken by full-time students in high school or college as part of their regular curriculum were not to be reported as adult education" but if a full-time high school or college student took swimming instruction at a local community center, for example, he was counted as a participant in adult education. Using this definition, NCES estimated that the number of adult education participants "who were not full-time students in high school or college increased from 13,041,000 in 1969 to 17,059,000 in 1975 (a 30.8 percent increase during the six-year period, or an average annual increase of 4.6 percent)." During this same time, they estimated, "the number of adults attending high school or college on a full-time basis increased 4.0 percent, or at an annual rate of 0.7 percent," resulting in an additional 1,013,000 adult students in high school or college. This brings the total number of participants to 18,072,000 (12.3 percent of the total adult population) (NCES, 1978a).

If this number of participants in adult education who were not full-time (17,059,000) represents "a market" for two-and four-year colleges, it would imply a truly staggering and wildly optimistic future for traditionally-oriented postsecondary institutions. In 1975, the total full-time equivalent (FTE) enrollment in all institutions of higher education was only 8,481,000 (FTE) (NCES, 1978b). That is, the potential additional market would be twice the current enrollment, although this should be tempered somewhat since the FTE's represented by the 17,059,000 is smaller than that number.

Even this figure, however, would not represent the real adult market for traditionally-oriented colleges. It includes many who should not be considered in the potential college market and it excludes many who should be considered. Some of the courses taken by participants in adult education are not offered by traditionally-oriented colleges and universities. Other courses may be offered, such as through extension programs, but they may not be taught by the "traditional" faculty or administered by the college's regular administrators.

Furthermore, NCES includes students under age 21 in their definition of participants in adult education. Most colleges and universities, however, consider this age group as their traditional clientele.

On the exclusion side, NCES neglects to include anyone over 21 years of age who is enrolled full or part-time in college but not taking extension-type courses. Surely this group represents a "real market" for traditional colleges.

A report prepared by K. Patricia Cross on adult learner's characteristics, needs, and interests utilizes the NCES definition of adult learners. She comments that "this definition has the advantage of conforming rather nicely to the common perception of what is meant by adult learners and adult learning activities but...definitions limited to 'organized' learning activities result in quite conservative statistics" (Cross & Valley, 1976, p. 76). Even though the present report is primarily concerned with adult participants in traditional postsecondary educational institutions, most of whom would be pursuing traditional degree interests because of the nature of the program they have entered, the different forms that the education of adults can take and alternatives to formal institutions of postsecondary education will be discussed in detail later.

A landmark study on participation, carried out by J.W.C. Johnstone and R.J. Rivera in 1965, was examined in estimating the number of adults engaged in educational activities, but that investigation was concerned with "all activities consciously and systematically organized for purposes of acquiring new knowledge, information, and skills' (p. 1) and covered a much wider range of activities than is usually associated with the term adult education. The adult population was referred to as persons either twenty-one or over, married, or the head of a household.

From the viewpoint of the colleges and universities, the potential adult clientele refers to those in the over-21 age group who might enroll either full or part time in regular college courses, taught by the regular faculty. The adult students may or may not plan to be taking courses for credit or applying them toward a degree. These students, then, would be called "adults in postsecondary education" rather than "participants in adult education"--two very different groups.

Estimates of the general population of students in college were available in 1978 from the Bureau of the Census (1979) in their Current Population Reports (CPS). Age breakdowns in these reports are similar to the age breakdowns available from our data. In October 1978, there were 16,245,000 18-to-21-year-olds in the general population with 5,197,000 or 32 percent of them in college. Of the 44,682,000 22-to-34-year-olds in the general population, 4,367,000 or 10 percent of them were in college. Two million seven hundred and thirty nine thousand 22-to-34-year-olds were undergraduates. Of these adults who were undergraduates, 1,380,000 of them were enrolled full time and 1,359,000 were enrolled part time. We do not know the particular year of college in which these students were enrolled or whether they were taking regular college courses, taught by regular faculty. These figures, however, do show that in October of 1978, there were 40,000,000 adults aged 22-to-34-years who were not enrolled in college, and many of these might be a potential market for traditional colleges and universities, as would be adults over 34 years of age.

To examine these estimates in more detail and to look at trends over time, the figures available in both 1972 and 1978 are broken down into two age categories--those aged 25 to 34, and those 35 years and over. The population is so grouped because we define the adult in our sample as those over 21 years of age, and the Current Population Reports include all years of college, not just the freshman year. Therefore, the traditional-aged student population (in any of the four college years) may be as old as 24. Hence the total adult student population refers to those who are 25 and over. Also, trends over time can be reviewed for the adult students without irregularities due to the effects of the G.I. Bill: Many college students in their early twenties are not returning adults but merely traditional students who have delayed entry by a year or two due to military service. As we shall see, this group has declined significantly as the number of Vietnam War veterans returning to college has diminished.

Between 1972 and 1978, there was an increase in the adult student population (25 or older) of almost 1.5 million. The increase in the traditional-aged cohort between these two years was only 700,000. Although this comparison appears to have important policy implications, particularly that more adults appear to be entering college, it must be remembered that even though the potential market for traditional postsecondary institutions is huge, there already are over a million and a half adults in college. So if, for example, one million full-time-equivalent adults are needed to offset the declining numbers of traditional-aged students, and if it takes five adult part-time students to make up for one full-time traditional-aged student (with respect to adult students placing similar demands as traditional-aged students on regular daytime faculty) (Cartter and Solmon, 1976), five million adults will have to be pursued. And these will not be the adults most inclined toward college attendance, since the million and a half adults with the largest propensity to attend are already attending. That is, in order to compensate for declining enrollments of new high school graduates, several million additional adults must be attracted.

In both 1972 and 1978, there were twice as many adults in the 25-to-34 age group as in the 35 and over group. (Nineteen percent of college students were 25-to-34-year-olds vs. nine percent who were 35 and over in 1972, and 23 percent were 25-to-34-year-olds who were 35 and over in 1978). By 1978, thirty-five percent of all college attenders were at least 25 years old. However, there is a sense that the growth rate is larger for the older group.

In 1972, 29 percent of the male college attenders were at least 25 years old, whereas only 26 percent of the women in college were at least 25. However, by 1978, the share of adult women outnumbered the share of adult men (33 percent of the men were 25 or older compared to 36 percent of the women). Overall, the proportion of adult women grew much more quickly than did the proportion of adult men.

The majority of traditional-aged undergraduate students (those 24 and under) tended to enroll in college on a full-time basis (88 percent in 1972 and 84 percent in 1978) as compared to adult students (25-to-34-years of age) who were inclined toward part-time attendance (59 percent in 1972 and 63 percent in 1978). Interesting differences in the enrollment status of adult and traditional-aged students are discernable when examined by institutional type. Over twice as many adults aged 25 to 34 years attended college on a full time basis in four-year colleges than did those in two-year colleges. Similarly, many more traditional-aged students who attended two-year colleges did so on a part-time basis than did those in four-year colleges.

Although these figures are instructive, some caution must be taken when comparing them with data reported below. We do not know how many of these adults represented in the CPS data have progressed beyond the freshman year. However, in many cases, the part-time status of adults would lead them to spend several calendar years in what might traditionally be viewed as the freshman year of college. Hence, our sample of freshman adults might be more representative of all adults in college than our sample of younger freshman is of all traditional-aged college attenders. The CPS summary statistics however, do provide some basis on which to evaluate the representativeness of our sample.

Given the actual and potential numbers of adults in undergraduate education, we need to know more about them as students and how they compare to their traditional counterparts. Our study of first-year college students will enable us to begin to obtain more detail on similarities and differences between adult and traditional-aged college attenders.

If colleges and universities want to evaluate adults as a potential expanding market, they must determine what, if any, administrative and curricular changes would have to be made to better meet the educational needs of these older students and/or to attract greater numbers of over-21-year-olds. In what types of programs and institutions do adults tend to enroll? What are their educational goals and expectations, their priorities in life, their financial and educational needs? Are the adults attending college today different from those who attended five or ten years ago?

If adult students and traditional-aged students have similar characteristics, attend comparable institutions, and have comparable needs, goals and expectations, few changes in postsecondary education will be required to accommodate this new clientele. On the other hand, if these two groups are substantially different, and if increased adult student enrollments are sought to offset the projected declining enrollments of traditional-aged students, the higher education system will have to change.

The Current Study. To assess the similarities and differences between adult and traditional-aged students, the Higher Education Research Institute (HERI) analyzed the survey responses of 13 cohorts of first-year college freshman. Since 1966, the Cooperative Institutional Research Program (CIRP) has annually surveyed students entering approximately 600 colleges across the United States. Each year the responses have been weighted and results have been compiled into a national norms series (1966 to 1978). The CIRP norms are based only on responses for first-time, full-time freshman from institutions with high response rates.

The CIRP samples include a significant number of first-time, full-time adults (51,085)(Table 1). The current study utilizes responses of all CIRP adult (over age 21) freshmen; a larger number than reported in the published norms because part-timers, returning students, and those from institutions with response rates too low to be reported in the norms are included. In particular, the CIRP institutions that tend to have the lowest overall response rates are two-year colleges, and since these are institutions which attract many adult students, and specifically, many adults who are poor, of minority racial or ethnic background, and less prepared than their traditional counterparts, it is likely that the CIRP data underrepresent adult freshmen from that sector, and those special groups from within that sector.* These 13

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* With reference to the total adult education movement, some argue that adult education typically reaches the most highly educated, whites, and the more affluent. It is difficult, therefore, to tell whether the results obtained in this study reflect biases in our sampling procedure, or even to determine whether overall, minorities, etc., are over or under-represented. Our sense is that although blacks might be overrepresented via a vis the total population in adult education broadly defined, they are probably underrepresented compared to the actual population of adults in two or four-year colleges. Nevertheless, when results are reported separately by institutional type, we expect our findings for these subgroups to be representative.

Table 1

Comparison of Norms Participants and Number of Freshmen in the CIRP Data Base Who are Age 21, by Survey Year

Survey Year	Number of CIRP Norms Participants	Estimated Number of Freshmen Over Age 21*	Actual Number of Freshmen Over Age 21
1966	206,865	3,413**	6,007
1967	185,848	3,527	8,629
1968	243,156	5,947	8,525
1969	169,190	4,974	9,568
1970	180,684	6,478	8,006
1971	171,509	4,448	13,571
1972	188,900	3,973	15,854
1973	189,733	2,901	17,125
1974	189,724	2,905	19,709
1975	186,406	2,969	20,270
1976	215,890	3,005	17,687
1977	198,641	2,981	15,558
1978	187,603	3,564	13,903
Total	2,514,149	51,085	172,400

*Norms data included only first time, full-time freshmen selected from institutions which meet certain criteria.

**Estimated on the basis of the percent in 1966 who were over twenty-one years of age.

years of surveys produced a sample of 172,400 adult freshmen, the largest group of adults in colleges for which data have ever been collected.

To reiterate: how representative our adult sample is of the total population of adult freshman is uncertain. It is impossible to determine the representativeness because there are not appropriate national statistics available on a disaggregated basis. When we compare the adults to the traditional CIRP norms samples, the differences we find are probably understated, because the norms exclude part-time freshmen (so the part-time responses in our adult samples were obtained spuriously), and because some of the first-time, full-time adults were included in both the norms and the adult comparisons.

To expand the scope of information available from the existing literature and the previously described data, the results from an additional analysis of a subgroup of adult and traditional-aged graduates from the CIRP-administered 1977 follow-up survey of the 1970 freshman cohort will be presented (Appendix B). The results of this analysis will be discussed in light of their implications for institutional policies affecting adult learners. The focus will be on what the research tells us about the special needs and demands of adult learners, with the hope of increasing the awareness of those involved in student affairs and related services. Results from this analysis cannot be generalized to all adults in postsecondary education because the sample of adults available from the follow-up study is quite small, and because the respondents were randomly selected and were not necessarily representative of all those that responded to the 1970 survey.

Chapter II

Demographics

Adults comprise a large and growing segment of the population of our colleges and universities, yet until now, very little has been known about their educational needs and goals. If higher education institutions are to look at adult students as substitutes for the decreasing numbers of traditional-aged students, they need to know how the adult and traditional students are different. To do this and to answer the following questions, a thorough examination of the characteristics of adult students is necessary. Do adults have the same high school preparation as their traditional counterparts? Are they more likely to enroll part-time rather than full-time? To need more or different financial assistance? To need more remedial help? To come from minority backgrounds or to be women rather than men? Are adults more likely to choose a college by its location rather than by its reputation? Are they likely to select the same majors and want the same types of courses as traditional freshmen do?

Enrollment status. Because the CIRP reports data only on first-time, full-time freshmen, we cannot meaningfully compare the adults' enrollment tendencies to those of the traditional-aged students. The CIRP data collection procedures, as well as its reporting format tend to exclude part-time students and those that attend classes in the evening, since the CIRP questionnaires are usually distributed during freshman orientation or registration for the traditional day-time students. Also, it must be kept in mind that classification of full- and part-time enrollment depends on institutional policies, so technically, these classifications may not be consistent from institution to institution. The Bureau of the Census (1979), however, estimates that, in 1978, 75 percent of all two-year college attenders and 53 percent of all four-year college attenders between 25 and 34-years-old were enrolled part-time. We have full-time/part-time information on our freshman adult sample only for the years 1972 through 1978. In those years, the share of adults enrolled part-time ranged from 20 to 26 percent for all CIRP institutions combined.* This confirms a bias in the CIRP adult data. Generally, adults apply for admission as part-time students so that they can continue working while going to school (Harrington, 1977). This would be a necessity at least for some adults because, as will be discussed later, adult students do not count on financial aid as much as traditional-aged students but tend to rely on their own incomes to finance their educations.

Despite the bias toward full-timers in the CIRP data, sex differences and trends over time are probably in the right direction. Women (especially those who were married and living with their spouses, as will be seen later) were more likely to enroll part-time than men, but between 1974 and 1978 (the two years we chose to show comparisons over time) the proportion of female adults who enrolled full-time increased faster (from 66 to 73 percent) than the rate of increase of full-time adult male attendance (Table 2). Before 1974, women were in all likelihood more restricted in their freedom to attend college full-time because of the prevalent attitude that women should take charge of child care responsibilities and the belief that older women's aspirations should not include pursuing higher education. Recently, however, attitudes toward women's roles have not been as limiting.

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*The reader should be reminded that we in no way imply that the part-time/full-time rates reported for the CIRP adult sample are representative of all adults in postsecondary education. We have shown that the part-time rate for all adults is much higher. However, it is likely that data reported are representative for part-timers and full-timers separately, and changes reported over time might be indicative of national trends. In many cases throughout this report, data are presented separately by enrollment status. When this is not done, the reader should consider possible biases due to the over-representation of full-time adults.

Adult freshmen in two-year colleges were more likely than those in four-year colleges and universities to attend part-time. The range for all two-year colleges is from about 21 to 36 percent part-time enrollment. Public colleges and universities seem to enroll a larger share of part-time adult freshmen than private colleges and universities.

Between 1974 and 1978, the proportion of full-time adults increased substantially in two-year colleges from 64 percent to 72 percent (Table 3). In most other types of institutions, the proportion remained relatively the same or decreased slightly. Perhaps four-year institutions are becoming more receptive to part-time students because of the decline in enrollment rates there, but, until we know how representative our adult samples are of the total adult freshman population, we cannot be confident of these part-time/full-time trends.

Between 1967 and 1969, two-thirds of our adult students were in college for the first-time (Table 4). In 1971, the percentage decreased to about 50 percent, and by 1978 only 28 percent were first-timers. All the relevant

Table 2

Enrollment Status of Adult Respondents, by Year and Sex
(in percentages)

	Enrollment Status and Year			
	1974		1978	
	Part-time	Full-time	Part-time	Full-time
Sex				
Men	20	80	16	84
Women	34	66	27	73

Table 3

Enrollment Status of Adult Respondents, by Year and Institutional Type
(in percentages)

	Enrollment Status and Year			
	1974		1978	
	Part-time	Full-time	Part-time	Full-time
Institutional Type				
All two-year colleges	36	64	28	72
All four-year colleges	17	83	21	79
All universities	14	86	13	87
Predominantly black colleges	19	81	25	75
Two-year colleges - Public	37	63	29	71
Two-year colleges - Private	17	83	11	89
Four-year colleges - Public	23	77	31	69
Four-year colleges - Private	12	88	8	92
Four-year colleges - Protestant	6	94	9	91
Four-year colleges - Catholic	11	89	20	80
Public universities	16	85	14	86
Private universities	9	91	10	90
Predominantly black colleges - Public	21	79	19	81
Predominantly black colleges - Private	5	95	35	65

Table 4

Enrollment Status of Adult Respondents, for All Insitutions, by Year
(in percentages)

Enrollment Status	Year												
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
First-time freshmen -		65	69	68	100	54							
Full-time							32	25	23	23	23	23	22
Part-time							9	7	8	7	6	6	6
Attended college before -													
Now Full-time							48	52	51	53	58	56	56
Now Part-time							11	16	18	17	14	15	16
Transfer from junior college		16	16	17		17							
Transfer from 4-year college		19	15	15		16							
Courses for credit here							23	24	23	26	22	18	21
No credit elsewhere							48	33	21	19	17	17	18
Credit at junior college							22	23	25	25	27	27	29
Credit at 4-year college							23	24	23	22	25	25	26
Credit at other postsecondary institution							14	11	12	13	13	14	14
No credit elsewhere								24	22	24	24	22	21
Junior college - No credit								3	4	5	6	5	5
4-Year college - No credit								3	3	5	5	5	4
Other postsecondary institution - No credit								13	15	16	16	15	15

literature on adults in postsecondary education seems to agree that those with more education tend to seek more education (Schlaver, 1977; Knox, 1977; Cross and Valley, 1976). There is more participation in postsecondary education by college graduates or those who have had some previous college background than by those with less schooling. Johnstone and Rivera (1965) point out that "somewhere in the process of getting an education, it seems people learn either that education itself is a continuing life experience, or that the way to acquire new skills and knowledge in life is to engage in formal or informal programs of study" (p. 104).

Also, better educated adults are often in professional white-collar jobs that emphasize continued learning. Promotion and salary in such occupations are often conditional upon academic course work and employers frequently pay tuition costs of attending college (Bishop and Van Dyk, 1977; Schlaver, 1977). Less educated adults tend to be in blue-collar jobs that do not require more formal learning to combat obsolescence (London, Wenkert and Hagstrom, 1963). Perhaps the employers of blue-collar workers discourage the pursuit of further education because increased knowledge could lead to higher aspirations and therefore increase job dissatisfaction.

This trend is also consistent with one predicted by the human capital literature, namely, those with the most education are the most likely to further augment their human capital through the acquisition of on-the-job training (Mincer, 1970). One reason for this is that those with more education are more efficient in converting schooling into productive human capital. To rectify this imbalance, W. Willard Wirtz (1964) suggests that substantial efforts should be directed toward increasing training opportunities for workers with the lowest educational level. Nevertheless, if the trend is real -- that is, increasing proportions of adults are returning to college--institutions may need to reevaluate their course-credit transfer policies. By 1978, fewer than one out of five adult freshmen had never taken any courses for credit at other institutions.

Age

Discussion of the age of adults in postsecondary education is confused by the different breakdowns used by various people in their attempt to differentiate between the traditional and nontraditional students. The largest adult group which has pursued postsecondary education appears to be in their twenties and thirties (Boaz, 1978; Wiggins, 1977; and Hamilton, 1978), with few older than their mid-50's. However, recent trends indicate that more post-fifty-year-olds are attending college, but generally not in degree credit programs. Knox (1977) suggests that "Beyond age sixty, adults continue to read materials that are readily available, but there is a decline in use of print media that must be obtained outside the home, such as books from libraries and book stores." (p. 174).

Many of those classified as adult students in the present study are close in age to those classified as traditional students. This may blur important distinctions, but we cannot determine fine age breakdowns for our adult samples because the CIRP questionnaires had only very broad categories beyond age 21.*

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* All those older than 21 were in one category. None of the pre-1970 samples had the categories 22-to-25-years-old and 26 and over.

From 1970 to 1973, the majority of adult freshmen were between 22 and 25 years old (Table 5). The percentage of adult freshmen over 25 years old increased from 38 percent in 1970 to 49 percent in 1978. This increase could be explained by the more accepting attitude toward adults in college in recent years. Or, perhaps, the concentration of adults in the 22-to-25-year-old range in the early 1970's may reflect the tendency for armed forces veterans to enter college after leaving active service.

Sex Differences. Over the years, there has been a dramatic increase in the representation of women in the adult sample (Table 6). Although we are unable to determine whether the increase in the percentage of women, between 1966 and 1978 (from 29 to 57 percent), is a result of CIRP sampling methods or a reflection of a real trend, we suspect it is at least in part the latter. If this trend is representative, it could confirm the general belief that more and more women are participating in higher education because of the greater encouragement offered to women to pursue their educational and career goals in recent years (Westervelt, 1975).

Moreover, Table 7 indicates that adult women in postsecondary education tend to be older than adult men. In most years, roughly 60 percent of the adult women in the CIRP adult sample were over 26 years of age, compared to around 40 percent of the adult men. This is probably due in part to men serving in the military in the early years of the sample. It might also be due to the fact that men begin work and very soon realize the value of a college education, whereas women are forced or deliberately elect to stay out of school for a longer period.

Table 5

Ages of Adult Respondents, by Year
(in percentages)

Year	Age	
	22-25	26 & over
1970	62	38
1971	63	37
1972	58	42
1973	53	48
1974	48	51
1975	47	53
1976	53	47
1977	52	48
1978	51	49

Data not available prior to 1970.

Table 6

Distribution of Adult Men and Women, for All Institutions, by Year

Sex	Year and All Institutions												
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Men	4241	5936	5884	6635	5476	8771	9905	10129	10447	10909	9011	7324	6018
Women	1712	2693	2641	2951	2530	4300	5949	6996	9262	9361	8676	8234	7885
Percent Women	29	31	31	31	32	33	38	41	47	46	49	53	57

Table 7

Percent of Adults Over Age 25, by Year and Sex

1970		1971		1972		1973		1974		1975		1976		1977		1978	
M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W
27	62	27	57	33	58	39	60	43	62	46	60	39	56	38	56	37	57

M = Men and W = Women.

Data missing for the years prior to 1970

Table 8 considers the proportions of adults of each sex who were part-time and full-time students from 1972 to 1978 by institutional type. Overall, men were much more likely to be attending full-time (over 80 percent were full-time, compared to about 70 percent of women). In almost all years, adult men and women in the predominantly black colleges were the most likely to be full-timers. Also, in black colleges differences in enrollment status between men and women were the smallest.

Adults in two-year colleges were most likely to be attending part-time with many more women than men having done so. Again, we are tempted to explain sex differences in enrollment status by the multiple commitments of women. Historically they have taken primary responsibility for child-rearing, and also, it is more likely that women work part-time so their husbands can attend college full-time. The need for effective low cost child care facilities, for better financial aid availability, and, perhaps, even for adjustments for social expectations of women are obvious if adult women are to be given equal opportunity with men for college study.

Racial Background. A question relating to racial background was available in all 13 CIRP years. The share of adult freshmen who were white fell from 87 percent in 1966 to 63 percent in 1975, and has held around 70 percent since then (Table 9). About 90 percent of the first-time, full-time freshmen have been white throughout the period covered. Black adult freshmen slightly outnumbered other* adult minorities in postsecondary educational institutions,

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* The Mexican-American/Chicano and Puerto Rican American racial groups were not distinguished from the "other" minority groups in the years 1966 through 1970.

Table 8

Institutional Type and Enrollment Status of Adult Respondents, by Year and Sex (in percentages)

Institutional Type and Enrollment Status	Year and Sex													
	1972		1973		1974		1975		1976		1977		1978	
	M	W	M	W	M	W	M	W	M	W	M	W	M	W
All 2-year colleges -														
Part-time	21	40	25	40	30	43	26	37	18	29	21	30	23	30
Full-time	79	60	75	60	70	57	74	63	82	71	79	70	77	70
All 4-year colleges -														
Part-time	12	18	8	24	10	24	12	26	11	22	12	26	13	27
Full-time	87	82	92	76	90	76	88	74	89	78	88	74	87	73
All universities -														
Part-time	13	30	10	27	10	20	10	20	11	23	9	21	8	17
Full-time	87	70	90	73	90	80	90	80	89	77	91	79	92	83
Predominantly black colleges -														
Part-time	5	13	13	20	18	21	15	25	2	6	13	16	20	29
Full-time	95	87	87	80	82	80	85	75	98	94	87	84	80	71
All Institutions -														
Part-time	16	32	17	32	20	34	18	30	14	25	15	26	16	27
Full-time	84	68	83	68	80	66	82	70	86	75	85	74	84	73

Data missing for the years prior to 1972.

M = Men and W = Women.

Table 9

Racial Background, for All Institutions, by Year and Student Type
(Traditional and Adult)
(in percentages)

Year and Student Type	Racial			
	White	Black	Other	White Ratio*
1966				
Traditional	91	5	5	.956
Adult	87	8	5	
1967				
Traditional	90	4	6	.944
Adult	85	9	7	
1968				
Traditional	87	6	7	.942
Adult	82	10	8	
1969				
Traditional	91	6	3	.923
Adult	84	11	5	
1970				
Traditional	89	9	2	.842
Adult	75	18	7	
1971				
Traditional	91	6	4	.835
Adult	76	15	9	
1972				
Traditional	87	9	7	.804
Adult	70	19	12	
1973				
Traditional	88	8	5	.750
Adult	66	24	11	
1974				
Traditional	89	7	7	.719
Adult	64	23	14	
1975				
Traditional	86	9	8	.732
Adult	63	25	12	
1976				
Traditional	86	8	7	.813
Adult	70	17	13	
1977				
Traditional	87	9	6	.780
Adult	68	20	13	
1978				
Traditional	88	8	6	.806
Adult	71	17	13	

*Ratio equals the proportion of white adults to all adult students divided by the proportion of white norms participants to all students in the norms.

however all of the minority groups generally increased their educational participation by 1978.

Table 9 also shows the ratios of the proportion of whites to all adults to the proportion of whites to all traditional students. If the ratio were one, the same proportion of minorities would exist in the traditional as in the adult student pools. Figures of less than one indicate that minorities were more represented in the adult student group. The highest ratio was .956 in 1966, which declined to .719 in 1974, and reached .806 in 1978. Hence, the trend in the ratio over time indicates that minorities were becoming an increasingly important part of the pool of adults in college compared to their representation in the traditional-aged student group. This trend was strongest from 1966 to 1974.

Bishop and Van Dyk (1977) have pointed out that attendance in post-secondary education by minorities is raised substantially if they live in metropolitan areas where college tuitions are relatively low. It might have been that the growing representation of minorities in the CIRP adult population resulted from an increasing participation in the survey of two-year institutions which have more minorities than do four-year institutions. Table 10 indicates that growth over time of the share of two-year college adults who were minorities closely parallels the growth of minority adults in the total sample. That is, the increased representation of minority adults reflects growth in both the two- and four-year sectors, not just a shift in sample composition toward increased participation of two-year colleges.

Table 10

Racial Background* of Adult Respondents, for Institutional Type, by Sex and Year
(in percentages)

Year and Sex	Racial Background and Institutional Type											
	All 2-Year Colleges			All 4-Year Colleges			All Universities			Predominantly Black Colleges		
	W	B	O	W	B	O	W	B	O	W	B	O
1966												
Men	85	10	6	93	2	6	94	2	4	7	82	10
Women	89	5	7	89	8	3	95	2	4	10	84	7
1967												
Men	85	8	6	89	4	7	92	3	6	5	86	9
Women	74	18	8	84	6	11	90	4	6	6	93	2
1968												
Men	83	10	7	89	4	6	92	3	5	9	68	13
Women	68	22	9	87	3	11	87	6	7	16	81	4
1969												
Men	85	8	6	88	7	5	93	5	2	10	81	9
Women	75	18	6	84	10	6	86	9	4	25	71	5
1970												
Men	80	13	7	82	11	7	88	6	6	12	86	1
Women	68	25	8	65	25	10	80	16	4	9	90	1
1971												
Men	77	11	10	85	8	6	87	5	8	12	78	10
Women	75	17	7	74	18	9	81	14	4	13	83	4
1972												
Men	71	14	16	76	15	12	85	8	10	5	84	11
Women	67	21	12	63	25	12	80	14	7	9	87	4
1973												
Men	66	22	11	76	13	11	86	7	8	5	90	5
Women	63	26	12	70	20	9	82	11	9	8	88	3
1974												
Men	61	22	18	75	14	13	80	9	13	8	82	8
Women	59	27	14	75	15	11	80	11	8	7	86	8
1975												
Men	62	24	13	73	13	14	79	9	13	10	79	12
Women	62	27	10	72	16	13	78	14	8	8	85	6
1976												
Men	72	14	16	75	12	16	77	12	14	14	70	16
Women	72	16	12	71	18	12	75	18	6	16	79	6
1977												
Men	70	12	17	73	13	16	81	9	12	6	78	16
Women	74	14	11	71	20	12	78	13	10	5	90	4
1978												
Men	78	10	14	73	11	16	79	7	13	8	68	29
Women	81	10	9	73	17	10	77	14	10	8	80	11

W = White, B = Black, O = Other

Table 11 describes the racial backgrounds of adult and traditional-aged students of each sex and for all institutions. In the early years for which data are available, generally a higher proportion of the adult women than adult men were black. In more recent years, about equal shares of women and of men were white but the share of black women was still higher than the share of black men. Whereas the proportions of men and women who fell into the "other" racial category were about equal in the early years, later on, the share of women who were of "other" races became smaller than the share of men in this category. However the overall growth in the share of adult students of both sexes who were not white is substantial and will be discussed in more detail below.

It is clear when comparing all institutions in Table 10 and 11 that a significantly larger share of both sexes among the adults are non-whites as compared to traditional-aged students. And the growth of non-white representation has been much more rapid among the adults than among the traditional-aged students.

Also evident from Table 10, is that overall, the proportion of white adults has declined, perhaps a bit more so for women. Black female participation rates have risen more than those of black males, particularly in recent years. Although the reader may desire to study more detailed trends by sex revealed in Table 10, it appears that racial differences far outweighed changes by sex or institutional type over time.

Table 11

Racial Background, for all Institutions, by Year, Sex and Student Type (Traditional and Adult) (in percentages)

Year and Sex	Racial Background					
	White		Black		Other	
	T	A	T	A	T	A
1966						
Men	91	89	4	6	4	5
Women	83	90	11	6	6	5
1967						
Men	90	87	4	7	6	6
Women	90	80	5	12	6	7
1968						
Men	88	85	5	8	7	7
Women	86	76	7	15	7	9
1969						
Men	92	86	5	9	3	5
Women	90	79	7	15	3	6
1970						
Men	90	79	8	15	2	7
Women	87	66	11	26	2	7
1971						
Men	--	78	--	13	--	8
Women	--	73	--	20	--	7
1972						
Men	88	72	8	16	7	12
Women	86	66	10	23	7	10
1973						
Men	89	67	7	23	5	10
Women	88	64	9	26	5	9
1974						
Men	89	64	8	22	8	16
Women	88	63	8	25	6	13
1975						
Men	87	63	8	24	8	12
Women	86	63	10	26	7	9
1976						
Men	87	71	7	15	8	15
Women	85	70	10	20	7	11
1977						
Men	88	68	8	18	6	15
Women	86	68	10	22	6	11
1978						
Men	89	69	7	16	6	16
Women	88	72	9	19	6	9

T = CIRP Norms Participants, A = Adult Participants

In our study, at least, there does not seem to be much difference by race in the proportion of adults who are part- or full-time (Table 12). Roughly three times as many adults in the CIRP sample attended full-time as attended part-time in 1974. For all three racial categories, the proportion of full-timers rose by 1978, with the increase for non-white adults being slightly larger. It is probably the case that efforts at removing barriers facing adults in higher education, such as the provision of sufficient financial aid, made it easier for them to attend full-time in the later years, although the full-time share in the CIRP exceeded the real figure by a significant amount. The percentages attending part-or full-time were similar for each racial category.

Marital Status. In the years since 1970 fewer married than unmarried adults usually attended college. For example, in 1971, 47 percent of the adult students were married, the married proportion rose to 51 percent in 1975, but then fell steadily to 42 percent in 1978. Between 97 and 100 percent of the traditional-aged students were unmarried. The extra responsibilities, and greater financial and time restrictions of married people seem to limit their ability to partake of college. Of course we do not know if married adults are more likely than single ones to have attended college previously, but if this is the case, their return to traditional college programs might be less important than this is for people with no prior college experience. That is, lower attendance rates by married people might be due to more than the barriers they face.

Table 12

Enrollment Status of Adult Respondents, by Year and Racial Background
(in percentages)

Racial Background	Enrollment Status and Year			
	1974		1978	
	Part-time	Full-time	Part-time	Full-time
White	27	73	23	77
Black	26	74	20	80
Other	25	75	19	81

Questions directly obtaining information on whether respondents were separated, divorced, or widowed were not available on the CIRP questionnaires. To get at this information we divided the group of married adult students into those who were living with their spouses and those who were not. The separated, divorced, or widowed group would fall into this second category along with the few married couples who, for example, may have separated to pursue careers in different geographical locations.

Table 13 indicates that more men than women who were unmarried and more women than men who were married and not living with their spouses attended postsecondary institutions in both 1975 and 1978. Many women who were married but not living with their spouses probably found themselves with few resources and inadequate skills with which to get a job to support themselves. Education could have been looked upon as a means to obtain the desired skills necessary for employment. Below it will be shown that job-related concerns in decisions about attending college were more important for women not living with their spouses than for others. In 1975, there were equal numbers of adult men and women students who were married and living with their spouses, but by 1978 there were more women than men in this category. This probably reflects improved child-care services and changing attitudes about single women participating in educational and vocational activities.

In both 1975 and 1978, the majority of the part-time adult student group was married and living with their spouses. This was especially true for men in 1975 (64 percent men vs. 59 percent women) and for women in

Table 13

Characteristics of Adult Respondents, by Marital Status
(in percentages)

	Marital Status and Year					
	1975			1978		
	Not married	Married, living with spouse	Married, not living with spouse	Not married	Married, living with spouse	Married, not living with spouse
Sex						
Men	52	44	5	66	30	4
Women	45	44	11	51	40	9
Enrollment status						
Part-time	32	61	7	40	55	5
Full-time	54	38	8	63	30	9
Institutional type						
All two-year colleges	41	50	9	49	45	6
All four-year colleges	53	41	6	61	33	6
All universities	58	37	5	68	28	4
All black colleges	55	32	13	66	21	13
Racial background						
White	48	48	4	55	40	4
Black	48	36	16	63	22	15
Other	55	36	10	66	27	8

1978 (57 percent women vs. 50 percent men). The majority of the full-time student group was made up of those adults who were unmarried. Also, there were more adults who were married but not living with their spouses in the full-time group than in the part-time group. It is obvious from these findings and others that single adults or those who are not living with their spouses, have fewer family-related responsibilities which infringe on the amount of time they can spend pursuing an education full-time.

Two-year college attendance was primarily made up of adults who were married and living with their spouses in 1975 but by 1978, there were slightly more unmarried adult males in two-year colleges (57 percent men vs. 44 percent women). Generally those who were unmarried tended to make up the majority in all other types of institutions. However, in 1975, there were more women who were married and living with their spouses in four-year colleges than unmarried women (55 percent married women vs. 46 percent unmarried women). It is surprising that in all institutions, enrollment of those who were married and living with their spouses dropped substantially by 1978. Black colleges enrolled the highest proportion of those who were married but not living with their spouses and universities enrolled the least.

There was a higher percentage of unmarried than married adults in all the racial groups examined. The white adult college population had the most respondents who were married and living with their spouses and the black group had the most adults who were married but not living with their spouses. Slight differences do emerge when marital status by racial background is examined by sex. In 1975 the white and black racial groups had equal numbers of men who were married and living with their spouses (45 percent) and in the white group there were more women who were married and living with their spouses than who were unmarried (52 percent married vs. 42 percent unmarried).

Number of Children. In 1973, 81 percent of men aged 22 to 25 and 68 percent of women of that age had no children. For those 26 and over, 38 percent of the men and 20 percent of the women had no children. By 1976, 85 percent of the men aged 22 to 25 and 68 percent of the women had no children, while 43 percent of the older men and 21 percent of the older women did not have children. Of those who did have children, women (probably including many who were separated, divorced, or widowed) tended to have more children than men regardless of their ages.

Father's and Mother's Educational Attainment. There is a big difference between the traditional-aged students and the adults in the educational backgrounds of their parents. Across all years, the fathers and mothers of the traditional-aged students were much more likely than those of the adults to have had at least some education beyond high school. Full-time adults generally had more educated parents than did part-time adults in both 1974 and 1978. This might reflect higher incomes of full-time adults who are better able than part-timers to forego a full-time income. Of course it is unclear why the adults from more educated families did not attend college during the traditional college-going years. Perhaps they did attend and are now returning as a leisure-time activity.

According to the reasoning of the human capital theorists, father's education is likely to reflect a person's socio-economic status (SES) (since men have traditionally been more likely to be in the labor force than women have, and there is a positive correlation between education and income), while mother's education will reflect a child's at-home acquisition of human capital. On both counts, our sample reveals adult students to be disadvantaged compared to traditional-aged students. Between 1966 and 1978, the share of adult students whose fathers had at least some postsecondary education rose from 25 to 31 percent, whereas for traditional students the share rose from 46 to 54 percent. This is another indication of the lower SES of adults. Over the same period the proportion of mothers of adults with at least some postsecondary experience rose from 20 to 28 percent; for traditional students, there was also an increase in the share of mothers who had attended college (from 38 to 45 percent).

Since the parents of adult students are older than the parents of younger students, these findings are not at all surprising, given the increasing educational attainment of the U.S. population. Nevertheless, traditional students are almost twice as likely as adult students to derive whatever benefits accrue to those coming from homes with educated parents. The challenge to the colleges to make up for these disadvantages is clear.

The adults who attend college seem to come from three possible pools. Some believe that it is the high SES adult who is likely to return to college--perhaps to take a variety of courses for enjoyment. Others believe in a "compensation" model, such that those who were unable to move directly from high school into college (perhaps due to income pressures or low grades) will return later to make up for what they missed earlier. Still others believe that adult participation in higher education is not entirely due to either the leisure or compensation models but that adults return or go to college because they want additional courses to update their skills. Perhaps their pattern of attendance is different from the traditional one. Their attendance is more sporadic or periodic with enrollments in degree programs not so much by choice as by circumstance: Sporadic or periodic enrollment may be the only available option if they are to study what they want. That is to say, our sample may be dealing with sizeable groups of people who have periodically taken specific courses in order to acquire skills or to learn particular things, but who have no option but to enroll in degree programs in order to learn what they want.

Even though all of these hypotheses are possibly valid, one hypothesis should not be chosen above the others because the group of adult students is not a monolithic group. The data we have presented, namely that adults come from lower SES homes, lead us to prefer the compensation hypothesis. Hence, our data leads us to conclude that colleges offering traditional, or at least career-related, programs for adults will be preferred to colleges seeking to cater to leisure needs of relatively affluent adults.

Chapter III

College Choice

Types of Institutions Attended As Freshmen. Schlaver (1977) has pointed out that larger institutions show a greater age diversity among the student body than small institutions do, but most adults choose smaller, public colleges with relatively low selectivity. That is, most adults attend two-year colleges while the majority of the traditional-aged student population enrolls in four-year colleges. This difference in choice could be influenced by the different types of courses offered at different institutions, lower tuition at two-year colleges, or geographic mobility considerations. Anderson and Darkenwald (1979) have said that "Geographical access or proximity to organizations that provide adult education has direct positive effect on participation rates." (p. 4).

The data in Table 14 are consistent with this observation. Generally, the greatest concentration of adults exist in the two-year colleges, particularly those which are publicly controlled. Roughly 36 percent of the adult students were in two-year colleges in 1966 and 1978, but between these end years, two-year college attendance rose to 64 percent in 1970 and then began to decline. There was a constant increase of adults in public four-year colleges (from eight to sixteen percent) and in private four-year colleges (from three to eight percent). Catholic college attendance by adults also grew from one to five percent over the period. It is unclear why adult attendance at public universities declined so dramatically from 40 to 15 percent during the period

Table 14

Adult and Traditional Students in Postsecondary Education, by Year and Institutional Type (in percentages)

Institutional Type	1966 T	1966 A	1967 T	1967 A	1968 T	1968 A	1969 T	1969 A	1970 T	1970 A	1971 T	1971 A
All two-year colleges	25	36	31	44	30	44	36	49	36	64	39	52
All four-year colleges	45	16	43	14	40	18	37	19	40	18	38	22
All universities	30	46	26	39	29	35	28	29	25	14	23	21
Predominantly black colleges		3		2		3		2		4	2	5
Two-year colleges - public	20	30	25	38	24	39	27	42	28	59	36	47
Two-year colleges - private	5	5	5	5	6	4	9	6	7	5	4	4
Technical institutions		1		1		2		1		1	3	1
Four-year colleges - public	18	8	15	7	21	9	19	10	21	9	19	10
Four-year colleges - private	7	3	7	3	7	3	7	4	7	4	6	5
Four-year colleges - Protestant	11	4	12	3	6	4	6	3	6	3	6	4
Four-year colleges - Catholic	6	1	7	1	4	2	3	2	3	2	3	4
Universities - public	23	40	19	35	24	30	22	25	17	11	18	16
Universities - private	7	4	7	4	6	5	5	4	7	3	5	4
Predominantly black institutions - public		2		1		1		1		3		4
Predominantly black institutions - private		1		1		2		2		1		1

T = CIRP Norms Participants, A = Adult Participants

Table 14 (continued)

Adult and Traditional Students in Postsecondary Education, by Year and Institutional Type
(in percentages)

	1972		1973		1974		1975		1976		1977		1978	
Institutional Type	T	A	T	A	T	A	T	A	T	A	T	A	T	A
All two-year colleges	39	51	41	49	41	53	42	46	44	42	40	43	37	37
All four-year colleges	38	22	36	24	35	22	35	24	34	31	38	30	38	34
All universities	23	22	23	19	24	19	23	21	22	22	23	19	25	20
Predominantly black colleges		5	2	8	2	6	3	9	3	5	3	8	3	9
Two-year colleges - public	35	48	38	45	38	50	39	42	41	38	37	40	34	34
Two-year colleges - private	4	3	3	4	3	3	3	4	3	4	3	3	4	3
Technical institutions														
Four-year colleges - public	19	12	20	13	20	11	10	14	19	18	22	16	22	16
Four-year colleges - private	7	5	7	5	7	4	7	3	7	6	7	6	7	8
Four-year colleges - Protestant	6	3	6	3	6	4	6	3	6	3	5	4	6	4
Four-year colleges - Catholic	3	2	3	2	3	2	3	3	3	4	3	4	3	5
Universities - public	18	18	18	15	19	16	18	17	17	18	18	15	19	15
Universities - private	5	4	5	4	5	4	5	4	5	5	5	4	6	6
Predominantly black institutions - public		2		7		5		7		4		7		6
Predominantly black institutions - private		2		1		1		1		1		1		3

T = CIRP Norms Participants, A = Adult Participants

covered. One likely explanation is that the absolute number of adults attending there remained stable but that all the growth took place in the two-year schools. The share of adults in Protestant colleges and in private universities remained at about four and five percent respectively over the 1966 to 1978 period.

Traditional-aged students were distributed across institutions quite differently from adults. There has been a steady growth in the popularity of two-year colleges as attendance by traditional-aged students has risen from 25 to 40 percent. Public four-year colleges have always had a greater proportion of younger than older students, and for the younger group, that proportion has risen from 18 to 22 percent. Roughly equal shares of traditional and adult students attended private four-year colleges in 1978 (about eight percent), although the proportion of traditional-aged students had remained constant while the adult portion had risen. The traditional-aged students in religiously controlled colleges has declined over the period. There has been a slight decline in the share of traditional students in public universities, but not at the rate of decline of the adult population in these universities.

To summarize, the number of traditional-aged students in two-year colleges has risen so that by 1978 the same proportion of adults and traditional students attended. However, the reader should be reminded that it is likely that many part-time adults in two-year colleges have not been identified in the CIRP sample. Although over the years, the proportion of traditional students in four-year colleges has declined, while the adult share has risen, a smaller number of adults still attend there. At the university level a slightly higher proportion of traditional than adult students attended.

From 1974 through 1978, respondents were asked whether the college in which they enrolled was their first choice, second choice, and so on. The majority of both traditional-aged (75 percent) and adult students (84 to 90 percent) attended their first-choice colleges as freshmen, while fewer than 20 percent attended their second-choice institutions or less (Table 15). There was virtually no difference between part-time and full-time adults in their probability of attending their first-choice institutions. This would be surprising if adult and traditional students applied to the same institutions, given the poorer preparation by the adults which will be discussed below. However, except for 1976 and 1978, a higher proportion of adult than younger students enrolled in two-year colleges. Moreover, adults who attended four-year institutions were usually enrolled in less selective schools than were traditional students.

One way to be somewhat certain that one will be accepted to one's first choice institution is to apply only to relatively unselective colleges. Twenty-four percent of the adults applied to one low selectivity, four-year college, and no others, whereas only 18 percent of traditional students did this. This, in part, explains why more adults attended their first choice institutions. In general, traditional students were more likely to apply to

Table 15

Choice of College, for All Institutions, by Year and Student Type (Traditional and Adult) (in percentages)

Year and Student Type	Choice of College		
	Less than second choice	Second choice	First Choice
1974			
Traditional	6	19	76
Adult	4	12	84
1975			
Traditional	5	17	78
Adult	4	10	87
1976			
Traditional	6	17	77
Adult	4	10	86
1977			
Traditional	6	19	75
Adult	3	11	86
1978			
Traditional	6	18	76
Adult	3	10	90

Data missing for the years prior to 1974.

more institutions than were adults. Probably adults were more limited in their choices due to their restricted mobility and so they applied to more local institutions. Thus it appears that one reason why adults were more likely to attend their first choice colleges is because that choice typically has less stringent admissions requirements than do the colleges preferred by traditional students. As we shall see throughout this report, other factors (immobility, financial constraints, need to work part-time) limit the choice set for many adults to two-year or other non-selective local institutions. Moreover, younger students might apply to "riskier" colleges (which they prefer but have little chance of being admitted to) on the odd chance that they would get admitted. And in fact, if the younger student were admitted, his or her life situation probably would enable such a move.

Why College Students Selected the College They Attended. In each survey year except 1966, 1969, 1970 and 1971, CIRP freshmen were asked about their reasons for selecting the college they attended. As shown in Table 16, the primary reason given by adults (and even more frequently by traditional students) was that the college had a good academic reputation. This seems somewhat surprising since adults most often attended two-year colleges which are not generally viewed as academically superior to other types of colleges. In fact, it is generally believed that adjunct faculty, which may be of lower quality than regular faculty, teach adult college students in two-year colleges. Hence for 1978 freshmen, responses were broken down in Table 17 by type of institution attended. The frequency of this reason still stands out. Academic reputation

Table 16

Reasons Noted as "Very Important" in Selecting This College, for All Institutions, by Year and Student Type (Traditional and Adult) (in percentages)

	1967		1968		1972		1973		1974		1975		1976		1977		1978	
Reasons	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A
Relatives wanted me to come here	46	23	48	24	10	5	9	4	8	6	8	6	7	4	6	4	6	4
Teacher advised me							5	4	5	5	5	3	4	3	4	4	4	3
Has a good academic reputation	46	34	43	31	48	43	49	44	50	50	48	46	43	40	48	47	51	47
Offered financial assistance					18	18	17	23	19	24	17	19	14	17	15	19	14	18
Not accepted anywhere else					3	2							3	2	3	2	3	2
Advice of someone who attended					17	16	19	19	18	20	17	19	14	16	16	18	14	16
Offers special educational programs					27	39	29	43	30	48	28	43	25	38	29	40	26	38
Has low tuition	22	26	25	24	20	24	27	35	28	36	25	33	18	23	18	24	17	21
Advice of guidance counselor					7	6	10	7	9	8	8	6	8	5	8	5	8	5
Wanted to live at home					13	22	14	23	13	26	14	23	12	23	12	24	10	24
Friend suggested attending											7	12	7	11	8	12	9	11
College representative recruited me	13	10	12	10							4	2	4	2	4	3	4	3
Could not get a job							3	8	3	10	4	9						
Wanted to live away from home	16	2	15	3	18	4	15	4	14	4	14	4						
It will help to get a better job											51	66						
Has a good athletic program	6	2	6	2	10	5												
Most friends going here					4	2												

T = CIRP Norms Participants
A = Adult Participants

Data missing for the following years: 1966, 1969, 1970, 1971.

was by far the most popular choice of adult and traditional students. Fewer of both groups (38 percent) in the two-year colleges indicated that their choice was based on academic reputation, and for the adult group in this sector, reputation was less important than was the fact that the selected two-year colleges offered special educational programs (indicated by 41 percent). Only in 1975, when the reason "it will help to get a better job" was suggested, did "academic reputation" rank below the top, when 66 percent of the adults and 51 percent of the younger students selected the "job-related" reason for their choice. It is unfortunate that this reason was not available in all of the years examined because in the bulk of the literature, job-related reasons were the most frequently mentioned reasons given by adults for either returning to institutions of postsecondary education or for beginning there for the first time.

It seems that those, particularly women, who until recently have not had a chance to participate in higher education are the ones who give increasing chance of achieving job-related aspirations as a reason for attending college most frequently (Bishop & Van Dyk, 1977; Gibson, 1977). Our data show that in 1975, married women, especially those who were not living with their spouses, were more likely to give job-related reasons for attending college than men (see Tables A-1 and A-2). Also "low tuition" and "offered financial assistance" were much more important reasons for attending college for married women who were not living with their spouses and unmarried women. Financial concerns of women in all marital groups seemed to decrease by 1978

Table 17

Reasons Noted as "Very Important" in Selecting Type of College (for 1978 Traditional and Adult Students) (in percentages)

Reasons	All 2-Year Colleges		All 4-Year Colleges		All Universities		Predominantly Black Colleges	
	Traditional	Adults	Traditional	Adults	Traditional	Adults	Traditional	Adults
Relatives wanted me to come here	6	4	6	4	5	3	11	11
Teacher advised me	4	2	4	4	3	4	7	6
Has a good academic reputation	38	38	55	52	63	55	50	41
Offered financial assistance	11	16	19	19	13	16	28	21
Not accepted anywhere else	4	2	2	2	2	1	3	2
Advice of someone who attended	13	15	15	17	13	14	16	23
Offers special educational programs	24	41	27	38	26	34	32	38
Has low tuition	21	29	14	13	14	14	19	39
Advice of guidance counselor	9	5	7	5	6	3	10	7
Wanted to live at home	15	29	9	22	4	19	10	21
Friend suggested attending	6	11	7	12	6	8	8	14
College representative recruited me	3	2	7	3	3	1	10	6

as fewer women gave financial reasons for choosing a particular college. This is probably because more and more women were entering the labor force and so were in better positions to pay for the education they desired.

Those with no more than a high school education, who have dropped out to get married or take jobs, or because college-going was not a standard in their neighborhoods, also give job-related reasons because increased education was felt to expand their chances of moving into a new job. Adults with more education are generally in professional white-collar jobs already and merely seek improvement or advancement at their present jobs (Arbeiter, 1977; Harrington, 1977).

Some believe that education is a far more important means of mobility than has been true in the past. Surely, as larger and larger shares of the population obtain college degrees, the cost of not having one grows.
Some of those who are unemployed return to school to increase their opportunities for employment. London, Wenkert, & Hagstrom (1963) point out that the incidence of psychological breakdown increases with unemployment and further education can be a very therapeutic device to combat such a state.

Adults who seek mid-life career change also indicate that pursuit of job-related aspirations is their reason for attending college (O'Keefe, 1977). They desire to obtain the new skills needed to make such a transition possible.

Another job-related reason for attending college concerns one's present job (Indiana Commission for Higher Education, 1979). As was mentioned earlier, most of the adults who give this reason have more education than other adults and are already employed in professional white-collar jobs. These people who desire to update or enhance competence at their present jobs are more interested in being trained than in receiving an education (Gibson, 1977). Additional study is often forced upon adults as it is increasingly becoming a requirement for the retention of professional licenses (Harrington, 1977). A very important influence on adults who enter educational institutions for this reason is the need to acquire flexible skills in a rapidly changing, technological society (Kyle, 1979; O'Keefe, 1977). The question here is whether the need for continuing professional education should be viewed as a potential reason why adults would enroll (or reenroll) in college, or whether the need for this type of career-related training will discourage adults from the traditional colleges toward extension, short-term, or in-house training programs.

The dominance of academic reputation, both over time and across institutional types, might be explained in several ways. Most students might not be comparing their institutions with the Harvards of the nation, but rather might be making comparisons with other nearby colleges with equally low, or lower reputations. Alternatively, "good academic reputation" may be interpreted in ways different from the interpretations used in national ranking studies: perhaps a school where friends attended is viewed as academically sound regardless of what the friends learned there; or a two-year college known to have a fine program in auto repair might be viewed as having a good academic reputation.

Other reasons which were fairly important in selecting a particular college for adult students were: the college offered special educational programs (38 to 48 percent depending upon the year), the college had a low tuition (23 to 36 percent), the students wanted to live at home (about 25 percent), and the students were offered financial assistance (about 20 percent) (Table 16). The importance of the fact that the college offered special educational programs is particularly interesting, although again the exact interpretation of this reason is unclear. The special program which is attractive might be one in auto repair or even the humanities or it might refer to special remediation or counseling programs which facilitate the entry and progress of adults, as below we will show that adults are likely to feel a need for remediation. But most probably, a special program is seen in relationship to the individual's goals, not the pool of postsecondary resources, i.e., many special programs are probably occupationally-oriented.

Reasons that were least important in selecting a particular college for adults included not being accepted anywhere else or wanting to live away from home.

The more traditional-aged students had similar reasons for selecting a particular college. In 1967 and 1968, however, the most important reason for selecting a particular college was that their relatives wanted them to go there. Another relatively important reason for more traditional-aged students to select a particular college was to live away from home.

In 1978, low tuition was particularly important in two-year and predominantly black institutions. This reason for attending a particular college was more important for adults than younger students. It is clear that programmatic and financial considerations are very important when adults select their colleges. Adults, more than younger students, were more likely to have attended because they were unemployed (about 9 percent said not being able to get a job was a very important reason compared to about three percent of traditional students). Few adults were influenced by relatives, teachers, counselors, or college recruiters.

Research on participation shows the importance of word of mouth and friends as very important reasons for attending a particular college. Friends provide a sense of personal relevance and legitimacy missing from impersonal program announcements. Yet friends who attended do exert some influence (Johnstone and Rivera, 1965). It seems that more information must be made available to adults, if in fact they are misinformed about options available, the academic reputations and programmatic offerings of these, and how to secure financial aid at other than very low tuition schools. More effective recruiting, along with provision of information, could probably attract some adults to colleges they have not considered in the past. But word of mouth probably will still be an important factor in college choice.

With several notable exceptions, Table 18 reveals that adults, regardless of enrollment status, had similar reasons for selecting their colleges in 1974 and 1978. It appears that part-timers were less inclined to indicate

Table 18

Reasons Noted as "Very Important" in Selecting this Particular College, for Adult Respondents, by Enrollment Status and Year (in percentages)

Reasons	Enrollment Status and Year			
	1974		1978	
	Part-time	Full-time	Part-time	Full-time
My relatives wanted me to come here	5	6	4	4
I wanted to live away from home	2	4		
My teacher advised me	4	5	2	4
This college has a very good academic reputation	39	53	37	49
I was offered financial assistance	15	28	9	20
Someone who had been here before advised me to go	20	20	15	16
This college offers special educational programs	48	48	32	39
This college has low tuition	42	34	25	20
My guidance counselor advised me	8	8	4	5
I wanted to live at home	33	23	35	21
I could not get a job	7	11		
I was not accepted anywhere else			1	2
A friend suggested attending			12	10
A college representative recruited me			2	3

"good academic reputation" as a reason. Clearly, part-time adults, particularly those who are working, would be less able to move to a "highly reputed" institution. Nevertheless, even among part-timers, almost 40 percent did indicate this reason.

Offers of financial assistance appeared to be more important reasons for selecting a particular college for full-time adults, while low tuition was a more important reason for part-time adults. Clearly only full-timers are likely to qualify for aid. Finally, the desire to live at home was more important for part-timers. This is probably due to a number of factors, especially job and family responsibilities and cost considerations.

Regardless of whether or not adult choices of colleges are based upon adequate and accurate information, several things are clear. They are selecting colleges which they think offer high quality and at times, job-related training, and they seek low-cost options. Research suggests that more and more four-year colleges are offering occupational programs as part of their curriculum. "A constant in the history of higher education in this country has been the changing nature of the curriculum. Today, the curriculum is still changing but these changes may now be as much a result of internal as of external pressures. One external pressure is to make the curriculum more sensitive to the occupational life of the institution's graduates; one internal pressure is the desire to survive." (Campbell and Korim, 1979, forward). Nevertheless, there does not seem to be much evidence in our data that the adults who are in college are the wealthy, attending to fill up their leisure hours. Yet differences between part-time and full-time adult students should be noted.

Chapter IV

Financing of College Education

It is already clear that financial considerations loom large for adults returning to college. Inadequate ability to finance a college education can have several effects. As Leslie (1978) has noted, the lack of financial resources to meet the cost of instruction is both prohibiting and limiting. If monetary concerns are great enough during the time when a potential student is deciding whether or not to attend college, he or she may decide to forego college altogether or to select low tuition, urban institutions that are close to home (Shulman, 1976). Once in college, excessive financial worries may increase the probability of dropping out before completing the program initially aspired to. Since the CIRP data deal only with students already enrolled in (the first year of) college, those whose concerns were great enough to dissuade them from attending are not considered. Nevertheless, it is important to assess the extent to which adults enrolled in college express concern with the sufficiency of their financial resources, and to compare the concerns of adults with the concerns of traditional-aged students. This financial concern on the part of adults may be due to their ignorance of available resources, or due to provisions in various aid programs which limit their accessibility to adults. Hence, if adults do express concerns, it is important to determine where these concerns are greatest so that appropriate action can be taken.

Generally, the majority of both adult and traditional-aged students had some concern about their financial situation but felt they would probably have sufficient funds to cover their educational costs (Table 19). Of course

Table 19

Financial Concerns of Respondents, for All Institutions, by Year and Student Type (Traditional and Adult) (in percentages)

	None (confident I will have sufficient funds)	Some Concern (but I will probably have enough funds)	Major Concern (not sure I will be able to complete college)
966			
Traditional	35	56	9
Adult	35	52	13
967			
Traditional	34	57	9
Adult	38	51	12
968			
Traditional	35	56	8
Adult	34	53	12
969			
Traditional	34	56	10
Adult	34	52	15
970			
Traditional	34	55	11
Adult	37	49	14
971			
Traditional	34	56	10
Adult	35	51	14
972			
Traditional	36	49	15
Adult	37	41	22
973			
Traditional	36	48	17
Adult	37	38	25
974			
Traditional	39	46	15
Adult	41	36	23
975			
Traditional	37	47	16
Adult	36	38	26
976			
Traditional	35	49	16
Adult	34	40	26
977			
Traditional	34	49	17
Adult	32	41	27
978			
Traditional	35	51	15
Adult	32	42	26

the concern reflected by CIRP respondents may seriously understate the concern in the whole adult population -- those with the greatest concern probably did not attend college. Roughly equal numbers of adult and traditional-aged students had felt confident that they would have sufficient funds for college in most of the years between 1966 and 1978. The proportion expressing this confidence was usually around 35 percent of both groups, although a slightly higher proportion of adults (37 to 41 percent) were confident in the 1972 to 1974 period, a time when more adults were drawing on their GI Bill benefits, probably after serving in the Vietnam War. In those years, about 50 percent of the adults were receiving GI benefits, compared to 45 percent in 1966 (Table 21). Since the early 70's, the proportion of adults relying on GI benefits has declined dramatically, from a high of 58 percent in 1971 to 15 percent in 1978 (Tables 21 and 22). Clearly, alternative sources of support had to be found for adults, and judging from the fact that the decline in adult confidence in their abilty to pay has been much smaller than the decline in utilization of GI benefits, some progress seems to have been made in this area.

However, the proportion of both groups of freshmen who expressed major concern about finance has risen during the period considered: traditional students from 9 to 15 percent, and adult students from 13 to 26 percent (Table 19). A review of the literature suggests that these findings on concerns of adult and traditional-aged students should not come as a surprise. As Schlaver (1977) says, "adults pay their own way whereas youth are subsidized" (p. 42). Whether or not adults are forced to finance their own ways because financial aid is not available to them is a more difficult question.

Financial concern by marital status was considered for the years 1975 and 1978 (see Table A-3). Adult students who were married and living with their spouses had less concern about financing their college educations than did those who were married but not living with their spouses or those who were unmarried.

Also considered was the differential extent of financial concern of adult students who were part-time and full-time in 1974 and 1978 (see Table A-4). It is clear that part-timers had significantly less concern than full-timers, probably because they could work while attending college. In 1974, 58 percent of the part-time but only 35 percent of the full-time adult students had no concern for finances. However, by 1978, concern of both full-time and part-time adult students had increased. This difference is confirmed by the regressions which follow.

Since in each year, over 60 percent of adults in college expressed at least some concern for their ability to finance their educations, it is interesting to learn who these concerned adults are. In order to characterize further the adults who were most concerned with costs, multiple regressions were run for four of the 13 adult freshman cohorts (1966, 1970, 1974, and 1978). The dependent variable was degree of concern with ability to finance their college educations (1 = none, 2 = some, 3 = major concern), and the independent variables were type of institution attended, major, and a variety of demographic and socio-economic traits, which unfortunately were not available in all years. The beta coefficients presented in Table 20 represent statistically significant partial correlations

Table 20

Correlates with Concern with Ability to Finance College Education

1 = none; 2 = some; 3 = major
Positive coefficient = > higher independent variable = more concern

	1966	1970	1974	1978
Black colleges		-.075		
Public two-year colleges		-.125	-.061	-.079
Public four-year colleges			.018	-.047
Private four-year colleges	.033		.028	
Protestant four-year colleges				
Catholic four-year colleges		-.030		.030
University, private	.044		.028	.033
Black, public			-.070	
Technical college	.033		*	*
Sex (2 = female)		.074	.113	.094
Age	*	-.091	-.046	-.040
Marital status (2 = married)	*		.070	-.055
White		-.090	-.106	
Black			.030	.061
Parental income	-.171	-.140	-.171	-.228
Mother's education	.035			
Own income	*	*	-.127	*
Agriculture	.042			
Biological Science			.019	.022
Business	-.033	-.046	-.058	-.069
Education		.028		
Engineering				-.038
Arts		.025		
Preprofessional	.041	.046		.023
Social science	.028			
Technical			-.029	-.036
Non-technical				-.027
Full-time	*	*	.166	
Part-time	*	*		-.107
First-time, full-time	*	*	.115	-.026
R^2	.0334	.0606	.1565	.1147
N	5,157	6,615	12,361	8,866

Note: Variables never entering: College types (all two-year, all four-year, all university, private two-year, university public, black private). Other race. Major (English, health, history, humanities, mathematics, physical science, undecided). First time, part-time.

* = Not available this year.
Blank = Not significant.

(i.e., correlations net of the effects of the other factors in the model). The fact that the multiple correlation coefficient (R^2) was very low for each regression tells us that factors not considered here are much more influential in determining financial concern than are the ones which are considered here. For example, the highest proportion of variance in "concern" was explained for in 1974, the only year for which a measure of personal (as distinct from parental) income was available. Clearly, this is an important factor, yet even when it was included, only 15 percent of the variance was explained.

What is clear from the available data is that adults from poorer families, and, even after holding income constant, black adults, had the most concern about money. Even though financial aid programs have been targeted for these groups, these programs have not served to alleviate financial concerns, at least among adult students. Since blacks are more highly represented in the adult college population than in the traditional-aged college-going group, perhaps a program of financial assistance seeking to make up for previous educational disadvantage should be targeted for this group.

Women and younger adults also displayed more financial concern. Since the coefficient on the sex variable was highest when independent income was included, it appears that the concerns of female adult students were independent of income. Few women have access to GI Bill benefits; many adult women have constrained mobility (less ability to select the least costly college); and may must attend part-time due to household responsibilities (whereas men who attend part-time may receive some subsidy from their employers). Thus, the special problems of adult women returning to college must be dealt with directly. Among adults, age probably is a proxy for earnings or savings, which explains the negative relationship between age and concern about finance.

In the 1978 regression, it appears that the unmarried adults had greater concern than the married adults did. However, in 1974, when personal income was included, the sign on the marital status variable was reversed. This leads to the inference that holding income constant, married adults have more financial concern than do single adults, a finding that is intuitively appealing given the additional expenses associated with raising a family. The 1978 results probably reflect the fact that single adults have fewer resources (lower incomes) than married adults do.

The most consistent correlations regarding type of institution attended and concern with ability to finance college revealed that adults attending public two-year colleges had the least concern, and adults attending private universities or four-year colleges had the most. These effects hold both before and after controlling for race and socio-economic background, as well as for personal income or proxies for income such as sex, age, and marital status. Hence, it appears that adults tend to choose low cost public two-year institutions partly to reduce their financial concerns, which seem to be present regardless of their income levels. If the regressions had revealed less financial concern for adults at the more costly institutions, we might have concluded that the rich chose the more expensive institutions and their good financial condition has alleviated money worries, whereas the poor went to inexpensive institutions and still had financial concerns. But this was not the case. Hence, it appears that financial aid, independent of income for adult students, is necessary to insure their access to more expensive (and, as some argue, more effective) institutions of higher education.

Controlling for the factors discussed above, business and technical majors consistently had the least concern for their ability to pay for college, whereas preprofessional and biological science majors had the most. Perhaps business and technical majors are more receptive to loan programs or, more likely, perhaps these are adults already holding real jobs and hence have the means to pay for their educations. Preprofessional majors' concerns probably reflect their expectations of longer periods of time ahead when they will still be paying for advanced training. In general, other than the cases just noted, adults majoring in different areas did not differ in their concerns with their ability to finance college.

Having noted the greater concerns with ability to finance a college education on the part of adults compared to traditional-aged students, we now return to data on how adults actually have paid for college over the years (Tables 21 and 22). Before looking at the detailed data which have been collected, a serious ommission must be noted. Since the CIRP survey was aimed primarily at students who entered college directly from high school, little consideration was given to employer-financed means of paying for college. Hence, we have no data on tuition remission or paid educational

Table 21

Source of Financing First Year of College, for All Institutions, by Year, and Student Type (Traditional and Adult)
(in percentages)

Sources of Financing	1966		1967		1968		1969		1973		1974		1975		1976		1977		1978	
	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A
Parental, family aid, or gifts									80	24	80	23	80	22	56	18	80	26	72	18
Parental or other family aid				26		25		24												
Parental aid		19																		
Grants or scholarships:																				
scholarship, grant, or other gift				31		35		38												
scholarship and grants									40	30										
scholarship		7																		
Basic Educational Opportunity Grant											25	22	27	23	21	24	33	41	22	25
Supplemental Ed Opportunity Grant											6	8	6	12	5	6	9	13	6	7
College work-study grant											13	11	12	9	9	7	16	15	11	8
State scholarship or grant											19	11	15	11	13	8	21	17	15	12
College grant (other than above)															9	5	17	12	12	8
Local or private scholarship or grant											20	8	18	6						
Other private grant															6	3	10	6	7	3
Loans:																				
Federally insured loans or college loans (for example, NDEA)									20	25										
Federally guaranteed student loan											10	14	10	11	7	8	13	15	10	11
National direct student loan											9	8	10	8	7	5	11	10	8	7
Loan from the college															3	2	5	5	4	3
Tuition deferment loan from college		4																		
Repayable loan				16		18		19												
Other repayable loan									8	9										
Federal government		15																		
Commerical loan		5																		
Other loan											7	7	6	6	4	3	7	6	4	3

T = CIRP Norms Participants, A = Adult Participants

Data missing for the following years: 1970, 1971, 1972

Table 21 (continued)

Source of Financing First Year of College, for All Institutions, by Year and Student Type (Traditional and Adult)
(in percentages)

Sources of Financing	1966 T	1966 A	1967 T	1967 A	1968 T	1968 A	1969 T	1969 A	1973 T	1973 A	1974 T	1974 A	1975 T	1975 A	1976 T	1976 A	1977 T	1977 A	1978 T	1978 A
Work and Savings:																				
Part-time or summer work									73	52	70	43	64	37	50	26	68	45		
Employment during summer		42																		
Other part-time work while attending college																			25	23
Employment during college		48																		
Full-time work while attending college																			2	15
Full-time work									12	38	11	35	9	28	6	15	8	30		
Personal savings and/or employment				74		72		71												
Savings from summer work																			47	16
Personal savings		48							54	41	57	36	53	33	40	22	56	39	20	15
Spouse									3	34	2	29	2	25	1	15	2	26	1	16
GI Bill		45																		
GI benefits from your military service									2	52	2	41	2	39	1	20	1	28	1	15
Federal benefits from parent's military service									4	4	2	2	2	2	1	13	2	2	1	1
Parents' social security benefits									8	2	9	3	10	2	6	2	9	3	6	1
Other									6	13	6	11	6	11	8	6	6	12	4	6

T = CIRP Norms Participants, A = Adult Participants

Data missing for the following years: 1970, 1971, 1972

Table 22

Source of Financing College Education for Adult Respondents, for All Institutions, by Year (in percentages)

Source of Financing	1970	1971	1972
Parental, family aid or gifts	19	35	28
Scholarships and grants	12	23	33
NDEA loans, federally insured loans, or college loans	11	24	32
Other repayable loans	7	14	19
Part-time or summer work	45	64	65
Savings from Full-time employment	38	54	54
Spouse's employment			42
Federal benefits from parent's military service	3	4	4
GI benefits from your military service	51	58	55

leave programs. Some respondents might have included such sources of support under the "employment" category. And the sampling procedures probably did not include many adults utilizing employer subsidies for higher education. Nevertheless, we must keep in mind that this source of finance might become increasingly important in encouraging adults to return to college.

From 1966 to 1969 and from 1973 to 1978, this question was available and phrased as "source of financing first year of college." Generally, for adult students in these years, the whole category of work and savings was mentioned as a relatively important source of financing first year educational expenses. This was true regardless of institutional type. All items in this category, however, decreased in importance over the years. GI benefits from their military service were utilized by adults in 1974 especially if they were black, and for others if they were in two-year colleges (see Tables A-5, A-6, and A-7). The Basic Educational Opportunity Grant (BEOG) was a significant source of finance for blacks and other minorities especially if they were in four-year colleges or universities. Those from minority groups, other than blacks, relied on parental aid as one major source of financing their college educations, particularly if they were attending four-year colleges in 1974 or if they were attending black colleges.

For traditional-aged students, in 1966 through 1969, only major sources of financial support during freshman year were available in the CIRP national norms publications. These students relied upon some type of parental or family aid as their major sources of finance, and loans and the GI Bill were relied upon least.

From 1973 on, the category of family aid was still by far the most important source of financing first year educational expenses, and spouse and the category of GI benefits (whether their own or their parents) were least important as financial sources for younger students.

From 1970 to 1972, this question was phrased a little differently - "source of financing college education" (not just first year). For adults in these years, the major source of financing their college educations was through their own military benefits. Personal savings or employment were relied upon by about one-third of the adult sample for financing their college educations. Again, in these years, the CIRP norms reported only major sources. Younger students relied upon more limited sources of financial support than did their adult counterparts. As in the other years, they counted on family and savings from part-time summer work to pay for their educations.

The CIRP data on adults reveal a number of other interesting trends as well. In the early years of the survey, slightly less than 25 percent of the adults utilized some form of loan to finance their college educations. By 1972, 32 percent had an NDEA or college loan and 19 percent had another type of repayable loan. Since 1973, as student loan programs had grown, the share of adults holding "other" (than college related) loans had declined dramatically to three percent. Yet the proportion holding FGSL, NDSL, NDEA, or other college loans had not risen enough to offset this decline. Even if we assume each individual from 1974 on held only one type of college-related loan, only about 20 percent of the adults were involved in educational loan programs. Whether this represents a change in attitudes toward loans in general, or a feeling that commercial rates are unreasonable when subsidized loans are being offered, is unclear.

It is generally acknowledged that the heyday of the loan programs has passed. Yet one would expect that adults, particularly those with some business experience, would be more receptive to this method of finance than younger students. Of course, as interest rates have risen since the mid-1970's, commercial loans appear to be less desirable and it was only in 1979 that earnings limits were removed from the subsidized educational loan programs. It appears that in the late 1970's, adult students were caught between high commercial lending rates and relatively low earnings qualifications for subsidized loans. Despite this, adults in college have always been more accepting of loans than have younger students or their choices have been more limited. It seems that adults are more willing to go into debt than are traditional-aged students who are less likely to persist because of the debt. In Astin's (1976) study, Preventing Students from Dropping Out, he found that reliance on loans is associated with decreased persistence among men in all income groups but the effects upon women are highly variable depending on the amount of the loan and the income level of the women's parents. Of course, the Astin study dealt only with traditional-aged students.

It is noteworthy that adults in our sample appeared to have reasonable access to grant or scholarship aid as well. In the late 1960s, between 30 and 40 percent of the adults in the CIRP files received some sort of gift (non-returnable) aid. Yet in the early 1970s, the share of adults who received such aid fluctuated, but averaged somewhere in the 20 to 30 percent range. In the mid- and late 1970s, once the aid programs from the 1972 Higher Education Amendments took effect, about one in four adults received BEOG grants, one in ten SEOG grants, 15 percent state scholarships, and another ten percent some other type of grant. According to our data, these percentages do not differ significantly from patterns revealed by traditional-aged students.

There were significant differences between full- and part-time adult students in their sources of educational expenses (see Table A-8). It is clear that those attending full-time were much more likely than part-timers to have had parental or family help, and were much more likely to have received any public subsidy in the form of grants, loans, or work study. Part-time students were much more likely to be working full-time while they attended college, and thus, did not need to rely upon summer jobs. Part-time students were more likely than full-time students to have relied upon spouse's income--it was probably the case that more women relied on their husband's incomes than vice versa because more women than men enrolled part-time. It might be that full-time adult students were younger than the part-timers; if so, these differences in aid patterns seem reasonable.

It is not clear whether the availability of public subsidy to certain adults encourages them to attend full-time or, and more likely, whether those who attend full-time are simply eligible for more subsidies. In examining the literature, it seems that a large part of the financial problem facing adults results from institutions charging higher rates per credit hour or specifying minimum fees per semester (i.e., half of the full-time credit load) for part-time students which many adults are (Westervelt, 1975). Fixed costs per registrant may be a justifiable reason why higher per course costs are imposed upon part-time students. However, "if adults are expected to pay fuller educational costs than their younger counterparts, their access to degree opportunities [if it is a degree they are pursuing] is likely to remain a secondary priority of the institutions that host baccalaureate programs for adults" (Eldred and Marienau, 1979, p. 39).

What is apparent is that adult students employed distinct patterns of financing their educations by employment status: there were part-timers who worked full-time, and full-timers who either received support from family or summer jobs or who competed with traditional students for the usual sources of aid. To what extent greater accessibility of public aid would encourage more adults to attend full-time is unclear. Surely, for many, education is secondary to a full-time job.

Source of first year's educational expenses was also examined by marital status for the years 1975 and 1978 (see Table A-9). The category of work and savings seemed to be especially important for unmarried adult students.

For those who were married and living with spouses, their main source of financing their first year of college came from their spouses. GI benefits from their military service was a very important source for adult students in general in this category in 1975 but more so for men than women (Tables A-10 and A-11). It is interesting to note that the Basic Educational Opportunity Grant was an important source for financing education for adult students, especially women who were married but not living with their spouses.

It should be pointed out here that the financial aid situations of the adult students must be looked at very differently from that of their traditional-aged counterparts. First of all, traditional-aged students usually were supported by their parental families. Aid in this case is based on parental family income. Adult students generally relied on their own income or savings or those of their spouses to finance their educations. The married adult student, especially one with a family, has a whole host of financial responsibilities which the more traditional-aged student does not have. For example, a married woman with a husband earning a relatively high income still might place a tremendous cost burden on her family by returning to school (i.e., child care), yet most financial aid programs have had a family earnings eligibility requirement. A traditional-aged student can declare herself independent of parents but a married female adult student with children cannot declare herself independent of her spouse. So the financial situation of the traditional student from an upper income family cannot be equally compared to that of the married adult student from the same "family" income level.

When source of financing first year's educational expenses was examined by father's educational attainment, it became apparent that offspring from different educational backgrounds financed their educations differently (see Table A-12). While work and savings were still quite important for adults regardless of father's educational attainment, parental or family aid, or gifts were significantly relied upon by adults whose parents obtained a college degree or a postgraduate degree. The Basic Educational Opportunity Grant was relied upon more so by adults whose parents had less education than more. Also, GI benefits from their military service were used more in 1974 by adults whose parents had less than a college education rather than by those who had more than a college education. Probably people from low SES backgrounds were more likely to enter the military.

Despite the slightly greater concerns expressed by adults regarding their ability to finance a college education, adult access to resources did not seem to be much worse than the access of younger students for those in our samples. This implies that the expenses of adults are higher than for traditional-aged students and any amount of aid covers less of their costs of living. Of course, in the future, the opportunities to obtain GI benefits will no longer be available to as many as was the case in the past. Yet the removal of earnings limits for loan eligibility might compensate for this loss, especially since, as mentioned before, adults seem to be more receptive to loans than are younger students.

As eligibility limits on other federal programs, particularly BEOG, are raised, accessibility to adults should increase. And most adults have greater resources in terms of earnings and savings than do traditional students. Traditional students might have greater problems in the future than in the past in relying upon parental help to finance their college educations due to inflation and the resultant decaying of savings.

What has not been considered in this analysis is the relative marginal discomfort of the costs of college experienced by adults. We have not considered the actual amount of aid given to adult and younger students. But it is likely that dollar amounts are not much higher for adults, given their overrepresentation in low cost institutions. That is, given the generally higher expenses of adults (with families), the main problem with current financing arrangements might be their tendency to continue channeling adults into two-year colleges. The challenge for other types of colleges and universities will be less to encourage more adults to attend college than to devise financing schemes which will enable adults to look beyond the public two-year colleges when making their choices. Given the recent research on college impacts (Astin, 1977), it is possible that if adults can attend the four-year college, the university, and higher quality institutions in general, the benefits to the adult students and to the broader society may be greatly increased. This assumes of course that what is most beneficial for traditional students (only part-time work, full-time attendance, four-year rather than two-year colleges, residential living) are also things which would increase the effectiveness of the college experience for adults. In reality, it is probable that adult students do not need these attributes in order to maximize what they get from college. They are more mature; their motivation is evidenced by the sacrifices they make to attend; and adults are more likely to look beyond the campus for social and leisure-time activities.

Chapter V

Preparation for College

More adults than traditional-aged students in our sample indicated that they were poorly prepared for college. However, some question whether adults are actually less prepared for college than their younger counterparts or just less confident or more realistic about their capabilities. Some suggest that adults just think they are less prepared which deters many from entering college in the first place. Results from our data indicate, however, that adults' beliefs in this area are probably accurate. In addition to the previously noted lower level of parental education, our study strongly supports the view that special help will be required if adults are to benefit from college as much as others do.

Many more adults (1974 to 1978) than traditional-aged students (one-third compared to 15 percent) say they were not in a college preparatory program in high school (Table 23). The data indicate that black adults were substantially less likely than white adults or other minorities to have been in college preparatory high school programs (55 percent of blacks, 67 percent of whites and 63 percent of other races had been in college preparatory programs in 1974; in 1978 the numbers were 58, 69, 68 percent respectively). It is also clear that the higher the parental income, the more likely were adult students to have taken college preparatory programs: In 1974, 56 percent of

Table 23

Type of High School Program, for all Institutions, by Year and Student Type
(Traditional and Adult)
(in percentages)

Type of High School Program	1974		1975		1976		1977		1978	
	T	A	T	A	T	A	T	A	T	A
College preparatory	87	64	86	64	86	66	86	66	88	67
Other	13	36	14	36	14	34	14	34	12	33

T = CIRP Norms Participants
A = Adult Participants

Data missing for the years prior to 1974.

adults from families with incomes below $4,000 were in college preparatory programs and this share rose to 81 percent of the adults from families with incomes above $30,000. In 1978, the participation in college preparatory programs ranged from 59 percent of adults with family incomes of less than $4,000 to 83 percent of adults with family incomes of $30,000 or more. This finding holds for members of each race separately as well. Similar patterns were revealed when father's education was considered; the more educated one's father, the more likely an adult student was to have been in a college preparatory program. Also, as would be expected, those with higher grades were more likely to have been preparing for college while in high school.

Most adults in postsecondary education came from families with incomes of $10,000 or more (Indiana Commission of Higher Education, 1979). If low SES adults are returning to college to make up for earlier educational deprivation, it is clear that they come less well-prepared than higher SES returning adults and contemporary traditional-aged students. Clearly, the nature of the student body will change as more low SES adults enter college, and hence, consideration of remediation needs will have to be given.

Part-timers who started college in both 1974 and 1978 were less likely to have participated in college preparatory programs than their full-time peers. Fifty-seven percent of the part-time adults in 1974 and 62 percent in 1978 had been in college preparatory courses. For full-time adult students the corresponding figures were 66 and 68 percent respectively. However, differences declined over time. Since the CIRP adult sample overrepresents full-time adult students, it also overstates the extent to which adults in college had been in high school college preparatory programs. However, differences are not great enough to cause us to revise our overall conclusions.

Curriculum Preparation in High School. The question of curriculum preparation--available from 1975 to 1978--was examined to determine the extent of preparation offered in high school (Table 24). Respondents' reports seem to indicate that high schools prepared adult students least effectively in foreign languages, musical and artistic skills, and vocational skills, yet offered better preparation in history and social sciences, reading and composition, and scientific subjects. Differences in preparation of part- and full-time adult students were slight. Full-timers had more preparation in mathematics, foreign languages and science but less preparation in vocational skills.

In 1978, adults appeared to have had substantially poorer preparation in all academic areas and in study habits than traditional students did. However, vocational and artistic preparation seems to have been about equal. This was true when comparisons were made between adult and traditional students at different types of institutions as well.

Remedial Help. A question dealing with need for remediation was available in 1971 and 1972, and from 1976 to 1978 (Table 25). Mathematics seemed to be the subject in which most of the adult and traditional-aged students

Table 24

"Poor Curriculum Preparation at My High School" for Adult Respondents, for All Institutions, by Year (in percentages)

	Year			
"Poor Curriculum Preparation":	1975	1976	1977	1978
Mathematical skills	26	27	26	26
Reading and Composition	15	16	14	14
Foreign Language	54	51	50	47
Science	18	18	18	18
History, Social sciences	10	11	10	10
Vocational skills	39	40	40	38
Musical and Artistic skills	43	43	41	41
Study habits	29	30	29	31

Data missing for the years prior to 1975.

Table 25

"Perceived Need for Tutoring," for All Institutions, by Year and Student Type (Traditional and Adult)
(in percentages)

	1971		1972		1976		1977		1978	
Need tutoring in:	T	A	T	A	T	A	T	A	T	A
English	16	22	20	27		20	13	21	14	21
Reading	11	11	11	13		11	7	11	8	13
Mathematics	36	39	39	44		33	26	36	25	36
Social Studies	4	4	5	6		4	2	5	4	10
Science	21	15	22	18		12	10	14	13	20
Foreign Language	21	20	22	22		13	12	17	14	23

T = CIRP Norms Participants
A = Adult Participants

Data missing for the following years: 1966, 1967, 1968, 1969, 1970, 1973, 1974, 1975 needed remedial help and both groups of students seemed to have been least in need of remedial help in social studies. Generally, adults seemed to have felt more in need of remediation than traditional-aged students did in all subjects, especially in the most recent years. In 1978, there were few differences between part-and full-time adult students in their perceptions that they needed remedial help. These data correspond to our previous findings regarding attendance in college preparatory programs. A possible reason why adults more often might feel they need tutoring is the fact that they have been away from formal education whereas younger students have not.

Nevertheless, with one exception, there is a perfect rank-order correlation between subjects for which adults were poorly prepared and subjects in which they felt in need of tutoring. The exception is that mathematics was the number one area for which tutoring was required whereas preparation in foreign languages was deemed poorest. Clearly, mathematical techniques have changed a great deal since the adult respondents were in high school. Also, research suggests that adults perform less well on those tasks which they do not use (e.g., grammar and math) and better on those where there is continual use (e.g., social studies and literature). But math is a basic tool for all curricular areas. This raises major questions of differences in performance on entrance exams and possible age discrimination in requirements.

As noted earlier, measures of the degree of preparation and the need for remediation are subjective evaluations by the students, rather than objectively determined ones. It is possible that differences between adult and traditional-aged students reflect differences in self-confidence rather than true differences in preparation. For example, the perception of poor preparation may be a function of time out of school, so that there is a feeling of ill-preparedness for the academic routine. Perhaps what is needed is not so much remedial work as refresher courses which will help to provide a bridge for the return to college. Nevertheless, the perceptions of adults might explain why more adults do not enroll. They feel they are not qualified to attend college.

High School Grade Point Average. If adults achieved lower grades in high school than did their younger colleagues, it might seem reasonable to infer that adults were less prepared for college.

Generally, the more traditional-aged students came to college with higher grade-point averages than their adult counterparts (more "A" and "B" averages) (Table 26). The majority of the adult students had more "B" and "C" high school averages upon entering college. However, a "B" average was the most common average for both traditional and adult students. More adult students had "D" averages than did those of the more traditional ages. Grade-point averages, in general, increased as the years progressed. A common explanation for this is grade inflation.

It is possible that returning adults had decided not to go directly from high school to college due to their low grades. If this were the case, then the inferior preparation is emphasized. However, the grade inflation phenomenon is widely known these days--what once was "C" work is considered "B"

Table 26

High School Grade Point Average, for All Institutions, by Year and Student Type (Traditional and Adult) (in percentages)

Year and Student Type	High School GPA			
	A	B	C	D
1966				
Traditional	16	54	30	1
Adult	7	42	48	3
1967				
Traditional	14	55	30	1
Adult	7	45	46	3
1968				
Traditional	14	55	31	1
Adult	6	44	47	3
1969				
Traditional	12	56	32	1
Adult	6	42	49	3
1970				
Traditional	14	57	27	1
Adult	4	46	47	3
1971				
Traditional	15	58	25	1
Adult	7	44	46	3
1972				
Traditional	18	59	23	1
Adult	7	46	44	2
1973				
Traditional	18	63	21	0
Adult	6	49	42	2
1974				
Traditional	19	60	22	0
Adult	7	45	45	2
1975				
Traditional	18	61	21	0
Adult	7	48	43	2
1976				
Traditional	19	61	20	0
Adult	8	48	42	3
1977				
Traditional	20	62	18	0
Adult	9	50	39	2
1978				
Traditional	23	59	17	0
Adult	10	51	36	2

work today. Hence, it is not necessarily true that grade differences between adult and traditional students reflect real differences in high school achievement. Yet, that there possibly were differences is emphasized by the data presented earlier about the need for remedial help.

Table 27 indicates the obvious point--most adults from 1973 to 1978 delayed entry into college for some time while the younger, more traditional-aged students went straight from high school to college. Although far from the majority, a significant number of adults never graduated from high school, but took the high school equivalency test (GED) before entering college. Nevertheless at least 84 percent of the adult students in the CIRP sample in each year between 1973 and 1978 had graduated from high school. And between 10 and 13 percent had entered college after taking a high school equivalency test. If these data are generalizable, it appears that only one out of eight adults in college entered via the GED route. And about four percent never even achieved high school equivalency--probably they attended two-year colleges.

A final aspect of preparation for college is the extent to which adult students had previously taken college-level courses. Tables 28a and 28b compare the previous college course experiences of part-time and full-time adult students in 1974 and 1978. Full-time adults were more likely than part-timers to have taken courses for credit at community colleges (27 percent versus 18 percent in 1974, and 31 percent versus 22 percent in 1978) and at four-year colleges or universities other than the one presently attended (24

Table 27

Year Adult and Traditional Respondents Graduated from High School, for All Institutions, by Year (in percentages)

Year graduated from high school	1973		1974		1975		1976		1977		1978	
	T	A	T	A	T	A	T	A	T	A	T	A
Same year as entered	93	1	92	1	92	1	93	1	93	1	94	1
Earlier than freshman year	6	86	6	84	6	84	6	86	6	86	5	88
GED high school equivalency	1	11	1	11	1	13	1	12	1	10	0	10
Never completed high school	1	2	1	4	1	3	0	3	0	2	0	2

T = CIRP Norms Participants
A = Adult Participants
Data missing for the years prior to 1973

Table 28a

Courses Taken by Adult Respondents at Any Other Institution, by Enrollment Status and Year (percent responding "yes")

Courses taken at any other institution	Enrollment Status and Year			
	1974		1978	
	Part-time	Full-time	Part-time	Full-time
No credit at any other institution	21	20	19	17
No non-credit at any other institution	24	22	22	21
Yes, credit at a junior or community college	18	27	22	31
Yes, non-credit at a junior or community college	4	4	5	5
Yes, credit at a 4-year college or university	20	24	22	27
Yes, non-credit at a 4-year college or university	4	3	5	4
Yes, credit at some other postsecondary school (i.e. Technical, Vocational, Business)	14	11	17	14
Yes, non-credit at some other postsecondary school (i.e. Technical, Vocational, Business)	18	14	18	14

Table 28b

Courses Taken for Credit by Adult Respondents at This Institution, by Enrollment Status and Year
(in percentages)

Courses taken at this institution	Enrollment Status and Year 1974 Part-time	1974 Full-time	1978 Part-time	1978 Full-time
No	74	78	73	81
Yes	26	22	27	19

percent versus 20 percent in 1974, and 27 percent versus 22 percent in 1978). About five percent of each group had taken non-credit courses. Somewhat more part-timers had taken courses for credit and non-credit at technical or vocational schools. However, part-time adults were more likely to have previously taken courses for credit at their current institutions. This probably is due to the greater commitment to a locality by part-time adult students.

It appears, then, that roughly one-quarter of the adults had taken college courses previously. This group probably had some advantage in facing their new college experiences.

Chapter VI

College Plans

Living Arrangements. Although only one-quarter of the adult students indicated that their college choice was very significantly influenced by their desire to live at home, this was twice as important for them as for younger students (see Table 16). Moreover, roughly 80 percent of the adult students lived within commuting distance of their colleges (50 miles or less), compared to about half of the traditional students. In every year, between 35 and 50 percent of the adults lived less than 10 miles from their colleges, compared to under 30 percent of the younger students who lived this close. It seems that an 11 to 50 mile distance became more of an option for adult students as the years progressed. These trends are probably due to differences in marital status and family situation; that is, adults were more likely to be married and to have had children.

Those coming from families where the father graduated from college or obtained a postgraduate degree tended to travel further distances to school. In 1973, they either stayed within ten miles of their home or more than 500 miles away. Of course, adults who were not married had more freedom to be more mobile.

Again, younger students usually have fewer family and job-related responsibilities than do older students so they are relatively free to be more mobile.

Over one-third of the younger students lived more than 100 miles away from their colleges, whereas only one-quarter of the adults did. However, the adult group appeared more likely to move away from home in recent years. The fact that adults are beginning to travel further distances to school could be due to the relative ease with which people commute, or perhaps attitudes towards marriage and family responsibilities do not restrict the mobility of adult students quite as severely as was true in the past.

Table 29 indicates that a higher proportion of adult women than adult men attended college within 100 miles from home. However, the differences are infrequently higher than ten percentage points. The hypothesis which led to the development of this table was that women might be significantly less mobile as regards to college choice than are men (Westervelt, 1975). Although women revealed a slight tendency to stay nearer to home, the data did not reveal major differences in mobility, particularly since at least three-quarters of both male and female adult freshmen remained within one hundred miles of home.

Roughly half of the traditional-aged students planned to live in college dormitories rather than in fraternities, sororities, or other student housing. Most adults planned to live in private homes or apartments which were probably non-parental (about 50 percent) or in other non-campus facilities (21 percent in 1973 and 14 percent in 1978). These data appear in Table 30. This situation implies that adults are much less likely to avail themselves of subsidized

Table 29

Distance from Home to College of Adult Respondents,
by Year and Sex
(in percentages)

Year and Sex	Distance from Home to College	
	100 miles or less	Over 100 miles
1969		
Men	82	18
Women	90	10
1970		
Men	82	18
Women	86	14
1971		
Men	81	19
Women	90	10
1972		
Men	69	31
Women	78	22
1973		
Men	70	30
Women	77	23
1975		
Men	70	30
Women	78	22
1976		
Men	67	33
Women	77	23
1977		
Men	67	33
Women	77	23
1978		
Men	79	21
Women	90	10

Data missing for the following years: 1966, 1967, 1968, 1974.

Table 30

Miles from Home and Where Plan to Live Next Fall, for All Institutions, by Year and Student Type (Traditional and Adult) (in percentages)

	1969		1970		1971		1972		1973		1974		1975		1976		1977		1978	
	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A
iles from home																				
10 or less	6	54	27	54	23	53	27	40	28	41			26	40	29	36	27	35	22	49
11 - 50	24	24	25	25	27	26	25	26	25	25			26	27	26	29	26	29	26	31
51 - 100	13	6	13	4	15	6	14	7	13	6			13	7	13	7	14	7	15	5
101 - 500	26	9	27	13	28	9	26	12	26	13			26	11	24	11	25	10	28	7
More than 500	9	7	9	4	8	6	9	16	8	15			8	15	8	17	7	17	8	7
here plan to live next fall																				
Parents or relatives									42	22	22	23	39	23	44	24	22	24	19	24
Other private home, apartment or room									5	47	28	52	7	49	7	50	26	50	25	48
College dormitory									50	8	40	7	51	8	47	9	42	10	46	12
Fraternity or sorority house									0	0	4	0	0	0	0	0	4	0	4	0
Other campus student housing									1	2	3	1	2	2	1	2	4	2	4	2
Other									1	21	3	16	1	19	1	14	2	15	2	14

= CIRP Norms Participants
= Adult Participants

ata missing for the years prior to 1969.

student housing, which probably contributes significantly to their greater expenses. This could imply that adults are simply not interested in getting involved or participating in the social environment of the campus or that the lack of housing on-campus for adults, especially those who are married, deters many from contemplating a return to college.

Another option in this choice set is living with parents or relatives. One-quarter of the adults had plans of this type, but probably most of them were living with spouses rather than parents. Between 20 and 40 percent of younger students indicated this arrangement, but they were probably living with parents and being subsidized.

As is revealed in Table 31, virtually no part-time adult students lived in college dormitories, fraternities, or sororities, or other campus housing. About equal numbers of full- and part-time adult students lived with parents or relatives and in other private homes, apartments or rooms. Clearly, the fact that part-time adult students selected the option "other" indicates that they probably lived with a spouse, in a family situation. Again differences by enrollment status were not great.

In Astin's (1977) work on college persistence, he found that the most important environmental characteristic associated with remaining in college was living in a dormitory during the freshman year. According to Astin, residential living fosters involvement with the college or university, which in turn leads to greater persistence rates and more positive impacts for traditional students.

Table 31

Living Arrangements of Adult Resondents, by Enrollment Status and Year (in percentages)

	Enrollment Status and Year			
	1974		1978	
Living Arrangements	Part-time	Full-time	Part-time	Full-time
With parents or relatives	24	23	25	23
Other private home, apartment or room	50	53	52	48
College dormitory	0	9	1	15
Fraternity or sorority house	0	0	0	0
Other campus student housing	0	2	0	2
Other	25	13	22	12

However, it has not been shown that these relationships hold for adult students as well. It is possible that while residential living is important in motivating young college students, adults who attend are sufficiently motivated to attend and persist without the involvement due to living on campus with other students. Those who enter college immediately after high school may do so because this is expected of them, or because no better options seem evident. Thus, some post-enrollment stimuli are needed to motivate them. On the other hand, adults who enter or return to college have made an explicit decision which probably involves significant sacrifice of income, family life, recreation and so on. Hence, adults may be more motivated and so, they may not need residential living and involvement to encourage them to exert adequate effort in their studies and to optimize the benefits they receive from attending college.

Degree Aspirations. For most of the adult and traditional-aged students, the highest academic degrees planned over the 13-year period were the bachelor's degree and the master's degree (Table 32). Although it appears that more adults than younger students had lower aspirations, as traditional students were more likley than adults to aspire to professional degrees, perhaps the aspirations of adults are just more specific than those of younger students. Again, these trends are consistent with the human capital theory, in that adults will have a shorter period of time over which to enjoy the benefits (financial and other) of college attendance. Thus, their incentives to incur the costs of advanced, post-college, education are lower than they would be

Table 32

Highest Degree Planned Anywhere, for All Institutions, by Year and Student Type (Traditional and Adult) (in percentages)

Highest Degree Planned	1966 T	1966 A	1967 T	1967 A	1968 T	1968 A	1969 T	1969 A	1970 T	1970 A	1972 T	1972 A	1973 T	1973 A	1974 T	1974 A	1975 T	1975 A	1976 T	1976 A	1977 T	1977 A	1978 T	1978 A
None	6	6	4	5	4	4	2	2	2	3	3	4	4	4	4	6	4	4	3	4	2	4	2	3
Associate (A.A. or equivalent)	6	9	7	10	7	10	9	11	8	17	8	12	6	8	8	12	8	13	8	10	8	10	8	10
Bachelor's (B.A., B.S.)	39	42	37	41	38	38	38	37	38	38	37	35	31	31	27	34	35	33	36	34	36	31	37	34
Master's (M.A., M.S.)	32	28	32	30	32	31	33	32	31	26	27	27	32	33	27	27	28	27	29	29	30	31	30	31
Ph.D. or Ed.D.	10	9	10	9	11	10	10	11	10	7	9	10	11	13	8	10	9	11	9	11	9	12	9	12
M.D., D.O., D.D.S., or D.V.M.	5	2	5	2	4	2	4	3	5	2	7	4	8	4	8	4	7	4	7	4	6	4	7	4
LL.B. or J.D. (law)	2	1	1	1	1	1	1	2	4	2	4	3	5	3	4	3	5	3	5	3	5	4	4	3
B.D. or M. Div. (divinity)	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	1	1	1	1	0	1	0	1
Other	2	2	2	2	2	2	2	2	3	4	3	3	2	3	3	3	4	5	3	4	3	4	2	3

T = CIRP Norms Participants
A = Adult Participants

Data missing for the following year: 1971 for younger students. Over time, the degree aspirations of adults had increased, so that by 1978, 43 percent of adults planned to obtain either a master's (31 percent) or a doctorate (12 percent). This was true regardless of institutional type. As Table 33 shows, adults in four-year and predominantly black colleges had higher degree aspirations than those in two-year colleges and slightly higher than those in universities, at least where the MA was concerned. If it will benefit society to have adults acquire advanced degrees, policies are needed to encourage or enable adults to attend four-year rather than two-year institutions. (Of course the causation could run in the opposite direction, such that those with lower degree aspirations choose two-year colleges. But the two-year experience probably does not serve to elevate these goals.) The fact that the aspirations of adults have increased makes sense because the higher level of educational attainment in the general society allows employers to "raise the screen." Where once a high school diploma was required for entry level positions, now an AA degree is required. As Table 34 indicates, part-time adults in 1974 and 1978 were more likely than full-timers to seek no degree at all, or to aspire to an associate's degree or a bachelor's degree. Full-time adults were more likely to seek advanced graduate or professional degrees. Again, the overrepresentation of full-time students in the CIRP adult sample probably overstates the adult student's degree aspirations.

Table 35 indicates that in 1978, students who were unmarried and those who were married but not living with their spouses had higher aspirations

Table 33

Highest Degree Planned for Adult Respondents, by Institutional Type and Year (in percentages)

	Institutional type							
	1974				1978			
Highest degree planned	All 2-year colleges	All 4-year colleges	All universities	Predominantly black colleges	All 2-year colleges	All 4-year colleges	All universities	Predominantly black colleges
None	10	2	2	4	6	2	1	3
Associate (A.A. or equivalent)	19	5	6	9	21	4	3	5
Bachelor's (B.A., B.S.)	37	31	33	30	38	34	31	25
Master's (M.A., M.S.)	21	36	29	35	21	36	34	36
Ph.D. or Ed.D.	6	13	15	14	5	13	18	21
M.D., D.O., D.D.S., or D.V.M.	2	5	6	4	2	4	7	4
LL.B. or J.D. (law)	2	3	6	2	1	3	5	3
B.D. or M.Div. (divinity)	1	2	1	0	1	2	0	1
Other	4	2	2	2	5	3	1	2

Table 34

Highest Degree Planned for Adult Respondents, by Enrollment Status and Year (in percentages)

	Enrollment Status and Year			
	1974		1978	
Highest Degree Planned	Part-time	Full-time	Part-time	Full-time
None	12	4	5	3
Associate (A.A. or equivalent)	17	11	14	8
Bachelor's degree (B.A., B.S.)	40	32	44	31
Master's degree (M.A., M.S.)	19	29	25	32
Ph.D. or Ed.D.	4	12	6	14
M.D., D.O., D.D.S., D.V.M.	1	4	1	5
LL.B. or J.D. (law)	1	3	2	3
B.D. or M.Div. (divinity)	0	1	0	1
Other	4	3	3	3

Table 35

Marital Status of Adult Respondents, by Highest Degree Planned and Year (in percentages)

	Marital Status and Year					
	1975			1978		
Highest Degree Planned	Not married	Married, living with spouse	Married, not living with spouse	Not married	Married, living with spouse	Married, not living with spouse
None	4	4	5	3	3	4
Associate (A.A. or equivalent)	9	16	15	7	13	12
Bachelor's degree (B.A., B.S.)	31	36	30	32	38	30
Master's degree (MA., M.S.)	29	25	28	32	29	30
Ph.D. or Ed.D.	12	9	10	14	8	14
M.D., D.O., D.D.S., D.V.M.	5	3	3	5	3	4
LLB or J.D. (law)	3	2	3	3	2	3
B.D. or M.Div. (divinity)	1	2	1	1	1	1
Other	5	4	6	3	3	3

than those who were married and living with their spouses. When marital status by highest degree planned is broken down by sex, it is clear that women, regardless of marital status, had lower degree aspirations than men. Clearly ability to finance advanced education is being reflected here.

Probable Major. This question was presented in all 13 years that the CIRP questionnaires were administered. Business seemed to be the most popular major for adult students, but selection of a probable major differed by institutional type (Tables 36 and 37). For example, in 1978 business was much more popular for adult enrollees at two-year and predominantly black colleges than at four-year colleges and all universities. Engineering, which seemed somewhat popular as a major in the first five years that this question was available, became much less popular in the 1970's. Health professions, education and the social sciences were relatively frequent choices as probable majors of adult freshmen.

The humanities and liberal arts departments did not seem to be popular with either traditional-aged students or adults and yet these are the very departments that need adults most to fill seats. Some adults may have enrolled in humanities subjects due to requirements by their majors, but it is extremely difficult to determine if they (the adult students) are electing to study these subjects. It seems that adults attend college for reasons of convenience--as long as a business major is available, they will attend a nearby college and fulfill humanities requirements if necessary; or perhaps colleges with liberal arts programs will change to accommodate the adult learner. As Glover (1979) contends, small liberal arts colleges will face declining enrollments and will shift to more career-oriented programs.

Table 36

Probable Major, for All Institutions, by Year and Student Type (Traditional and Adult)
(in percentages)

robable Major	1966		1967		1968		1969		1970		1971		1972		1973		1974		1975		1976		1977		1978	
	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A
griculture	2	3	2	2	2	2	2	2	2	2	3	2	3	2	3	2	4	2	4	2	4	2	4	2	3	1
iological sciences	4	2	4	2	4	2	3	2	4	2	4	3	4	2	7	4	7	4	6	4	6	4	5	4	5	3
usiness	14	19	16	21	16	22	16	22	16	23	16	19	16	18	18	18	18	18	19	18	21	19	22	19	24	20
ducation	11	9	10	9	12	9	11	9	12	7	10	7	7	5	12	9	10	8	10	8	9	8	9	8	8	8
ngineering***	10	6	10	16	10	12	10	12	9	11	7	7	7	7	7	7	7	6	8	6	8	7	9	7	10	7
nglish	4	3	4	3	4	3	4	3	3	2	2	2	2	2	2	2	1	2	1	2	1	2	1	2	1	2
ealth professional	5	7	5	8	5	10	6	9	7	14	9	14	11	17	10	16	4	15	4	15	3	15	7	14	6	16
istory and political sciences*	7	4	7	5	7	5	6	5	5	4	4	4	4	3	-	3	2	3	2	3	2	3	3	2	3	2
umanities	5	3	5	3	4	4	4	3	4	4	3	4	4	4	3	4	7	4	6	4	6	4	2	3	1	3
ine arts***	8	7	9	6	9	7	9	7	9	7	9	8	9	7	7	6	8	7	7	6	7	6	6	7	6	6
athematics and statistics	4	2	4	2	4	2	4	2	3	1	3	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1
hysical sciences	3	3	3	2	3	2	2	2	2	1	2	2	2	1	3	2	3	2	3	2	3	2	2	2	2	2
reprofessional**	7	4	7	4	6	4	6	4	7	4	8	6	9	6	-	-	-	-	-	-	-	-	3	2	3	2
ocial sciences*	8	8	8	8	8	9	9	10	9	8	9	11	8	10	-	11	7	11	6	10	6	9	5	9	5	9
ther fields (Technical)***	2	4	3	5	3	5	4	5	4	6	5	7	6	9	5	7	8	9	9	10	8	8	7	8	8	8
ther fields (Nontechical)***	3	2	2	2	2	2	2	2	2	1	3	2	3	2	7	7	10	9	10	9	11	9	9	8	9	8
ndecided	2	1	2	1	2	1	2	1	2	1	2	1	5	2	5	2	4	2	5	2	5	2	5	3	5	2

= CIRP Norms Participants, A = Adult Participants

*Percentages for history and political science and social science are not presented in 1973 for traditional-aged respondents because hey were calculated differently in the published norms reports.

**The whole category of preprofessional major was not available from 1973 to 1976.

***From 1966 to 1972 and 1977 to 1978, the whole category of fine arts included architecture and the category of other fields technical) included other professional. From 1973 to 1976, fine arts was included in the engineering category and other rofessional was included in other fields (nontechnical). These four majors are therefore, not directly comparable across all f the years.

Table 37

Probable Major for 1978 Adult Respondents, by Institutional Type
(in percentages)

Probable major	All 2-year colleges	All 4-year colleges	All universities	Predominantly black colleges
Agriculture	2	1	1	2
Biological sciences	2	3	6	4
Business	24	19	15	25
Education	6	11	6	10
Engineering	6	7	8	8
English	1	2	2	1
Health professional	22	14	13	11
History and political science	1	2	3	3
Humanities	2	4	4	1
Fine arts	4	7	8	6
Mathematics and statistics	0	0	0	1
Physical sciences	1	1	3	1
Preprofessional	1	2	3	1
Social science	5	11	12	9
Other fields (technical)	12	5	5	9
Other fields (non-technical)	8	8	6	8
Undecided	2	2	2	1

Business and education were popular as probable majors for traditional-aged students, while the choice of engineering followed a pattern over the years similar to that of their adult counterparts.

The least frequently chosen majors for both adult and traditional-aged students were: agriculture, biological sciences, humanities, mathematics and statistics, physical sciences, and "undecided." However, traditional-aged students generally considered these majors to be slightly more desirable than adult students did. Perhaps this is because adults tend to enroll in college to attain a specific outcome, whereas traditional-aged students tend to experiment with things which sound interesting but may not be practical or worth four years of study.

Table 38 indicates substantial similarity in probable major between part-time and full-time students. The only difference was that many more of the part-time than full-time adults planned to major in business. Thus, the CIRP sample probably understated adult interest in business programs. This is an important finding given the hope expressed by humanities programs (and others which are suffering excessive enrollment declines) that returning adults will fill the empty seats in their classrooms.

Selection of probable major did not differ for adults by marital status as can be seen from Table A-13 in the Appendix, but men were more interested in business majors while the health professions were more popular with women.

Table 38

Probable Major of Adult Respondents, by Enrollment Status and Year (in percentages)

	Enrollment status and year			
	1974		1978	
Probable major	Part-time	Full-time	Part-time	Full-time
Agriculture	1	2	1	2
Biological sciences	2	5	2	4
Business	25	15	28	18
Education	7	8	7	8
Engineering**	5	6	5	8
English	2	2	2	2
Health professional	16	14	15	16
History and political science	1	3	1	2
Humanities	3	4	3	3
Fine Arts**	6	7	5	6
Mathematics and statistics	0	1	1	0
Physical sciences	1	2	1	2
Preprofessional*	-	-	0	2
Social science	9	11	9	9
Other fields (technical)**	9	10	8	8
Other fields (nontechnical)**	9	9	8	8
Undecided	3	2	4	2

*The whole category of preprofessional major was not available in 1974.

**In 1978, the category of fine arts included architecture and the category of other fields (technical) included other professional. In 1974, fine arts was included in the engineering category and other professional was included in other fields (nontechnical). These four majors are therefore, not directly comparable across the two years.

Institutional Quality. Adults tended to choose and enroll in institutions with lower selectivity levels than their traditional-aged counterparts, but the reputation of the whole institution may be irrelevant in most adults' decision-making. Instead, the adult student may consider more the quality of particular departments or programs within an institution. For instance, he or she may choose to attend a relatively unselective institution because of particular interests, the health science departments or business departments, for example, may be of high quality. Furthermore, the higher quality institutions may not offer as wide a range of departments (e.g., business, nursing) as less selective institutions do.

Probable Career Occupation. After the nonspecified "other" category, the career most often selected by adult freshmen over the years was businessman (Table 39). Between 1966 and 1970, secondary educator and engineer were somewhat popular, as was nursing from 1970 on. As would be expected, business management and engineer were popular choices for adult men, while nurse was an attractive option for adult women.

There was really very little difference between adult students and traditional-aged students in anticipating an occupation. However, adult students appeared to be more confident of their probable career occupations, whereas, there were a significant number of traditional-aged students who remained undecided as to probable career occupation, especially in recent years. This was probably due to the fact that more adults were already working.

Table 39

Probable Career Occupation, for All Institutions, by Year and Student Type (Traditional and Adult)
(in percentages)

Probable career occupation	1966		1967		1968		1969		1970		1971		1972		1973		1974		1975		1976		1977		1978	
	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T*	A	T	A	T	A	T	A	T	A	T	A
Artist (including performer)	7	5	8	4	6	4	6	4	6	4	6	6	6	6	-	5	6	6	5	4	7	7	7	7	6	7
Businessman	12	18	3	18	11	18	11	18	11	18	11	15	10	10	-	16	13	14	14	14	16	16	18	16	19	17
Clergyman	1	1	0	2	1	2	1	2	1	2	1	2	1	1	1	2	1	2	1	2	1	2	0	2	0	2
College teacher	5	2	1	2	4	2	3	2	4	2	1	3	6	3	1	2	5	2	5	2	5	3	4	2	4	3
Doctor (M.D. or D.D.S.)	2	3	2	2	1	2	1	2	1	1	4	3	1	2	6	3	1	2	1	2	0	1	0	1	0	1
Educator (secondary)	14	10	19	10	14	11	13	10	11	6	9	7	6	5	-	4	4	3	4	3	4	4	3	3	3	3
Elementary teacher	8	7	18	8	9	8	9	7	8	6	7	5	6	5	4	3	4	3	3	3	4	4	4	4	4	4
Engineer	9	15	0	13	8	10	8	10	8	9	5	6	5	5	-	5	5	4	6	4	8	6	8	7	9	7
Farmer or forester	2	3	1	2	2	2	2	2	2	2	3	2	3	2	3	2	4	2	4	2	3	2	3	2	2	1
Health professional	5	3	6	3	4	3	4	4	4	3	6	5	7	5	9	8	9	8	9	8	7	6	7	6	6	5
Lawyer	4	2	1	2	3	2	4	2	4	2	4	2	5	3	5	3	4	2	4	2	4	3	4	3	4	2
Nurse	2	5	5	6	3	8	3	7	4	11	4	10	5	12	4	12	5	13	5	14	5	13	4	13	4	15
Research scientist	4	3	2	2	3	2	2	2	3	2	2	2	2	2	-	2	2	1	2	2	2	2	2	2	2	2
Other choice**	23	21	25	22	20	21	22	22	22	27	24	25	23	27	-	28	26	31	25	29	23	26	23	26	23	25
Undecided	4	2	10	4	11	5	11	6	12	6	13	7	14	7	11	6	12	7	14	8	10	6	10	7	11	7

T = CIRP Norms Participants
A = Adult Participants

*Percentages for many of the probable majors of traditional-aged respondents in 1973 were not presented here because they were calculated differently in the published norms reports.

**From 1966 to 1972 and 1977 to 1978, the category of other choice included psychology. From 1973 to 1976, a career in psychology was included in the category of health professional. These two occupational categories are therefore, not directly comparable across all of the years.

Table 40 presents data consistent with the statistics on the choice of a major. The largest difference between part-time and full-time adult students with respect to career choice was the part-timers' interest in business management. Careers which require advanced graduate study were selected less often by part-timers.

This section has served to stress the general similarities between part-time and full-time adult students. Overall, the biases, resulting from overrepresentation of full-time students in the CIRP adult sample, appear to be small.

Table 40

Probable Career Occupation of Adult Respondents, by Enrollment Status and Year (in percentages)

	Enrollment status and year			
	1974		1978	
Probable career occupation	Part-time	Full-time	Part-time	Full-time
Artist (including performer)	4	6	6	7
Businessman	17	13	22	16
Clergyman	1	2	1	2
College teacher	1	2	1	1
Doctor (M.D. or D.D.S)	1	3	1	3
Educator (secondary)	2	3	2	3
Elementary teacher	2	3	4	4
Engineer	3	4	5	7
Farmer or forester	1	2	1	1
Health professional *	6	8	5	5
Lawyer	1	3	2	2
Nurse	14	12	15	15
Research scientist	1	2	1	2
Other choice *	38	30	27	24
Undecided	7	7	9	6

* In 1978, the category of other choice included psychology. In 1974, a career in psychology was included in the category of health professional. These two occupational categories were therefore not directly comparable across the two years.

Chapter VII

Life Goals

In order to best serve (and hence attract) adult students, college administrators and faculty members must be aware of what these adults seek to achieve from their postsecondary educational experiences. Only then can adult students be assisted in achieving these goals. As Anderson and Darkenwald (1979) have said, "The most powerful predictor of persistence in adult education is satisfaction with the learning activity in terms of its 'helpfulness' in meeting one's objectives" (pp. 4-5). The first part of this section describes the goals of adults in the CIRP freshman data base over its thirteen years. Comparisons are also made with goals of traditional students. Clearly, if traditional students are being served well, and if goals of adult and traditional-aged students are similar, then few adjustments may be required in order to help the new adult clientele. On the other hand, if adult goals differ from goals of younger students, more adjustments are called for. The second part of this section attempts to clarify the goal patterns of adults by using multiple-regression analysis to identify traits of adults that differ in their desires to achieve broad classes of life goals.

Important Objectives for Adult Students.* Eleven objectives were presented somewhat consistently in all thirteen years of the CIRP surveys (Table 41). Of these, two were most important over the years to at least 60 percent of adults: to "be an authority in my field," and to "help others in difficulty."

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*We focus on responses which are "essential" or "very important," as opposed to "somewhat important" or "not important," in reporting our data. The first two are referred to as "important" and the second two as "unimportant" in order to simplify the discussion.

Table 41

Objectives Considered to be "Essential" or "Very Important," for All Institutions, by Year and Student Type (Traditional and Adult)
(in percentages)

	1966		1967		1968		1969		1970		1971		1972		1973		1974		1975		1976		1977		1978	
Objectives	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A
Artistic objectives																										
achieve in performing art	11	6	11	6	9	4	11	6	13	7	12	8	12	9	20	19	11	9	12	9	12	10	13	12	13	10
write original works	14	13	14	10	13	10	14	11	10	14	13	13	14	14			12	14	12	14	13	15	14	17	13	16
create artistic works	15	14	16	13	14	12	16	14	16	19	15	16	18	19			14	17	14	17	14	18	16	20	14	18
perform or compose music	8	4	8	4	6	4																				
Status objectives																										
be an authoritiy in my field	66	70	68	70	58	63	59	64	67	72	60	62	61	62	62	64	62	62	70	68	70	67	75	71	73	68
obtain recognition from colleagues	48	42	41	37	37	35	41	39	40	37	37	39	37	39			39	39	43	41	46	42	48	44	50	44
have administrative responsibility	29	37	25	33	22	30	24	30	22	26	20	27	24	32	27	33	26	29	37	35	32	34	34	35	36	36
make a theoretical contribution to science	13	16	12	13	10	11	10	12	10	10	9	11	11	13			13	16	14	16	14	17	14	17	14	17
becoming a community leader	30	26	24	22	21	20	18	18	15	14	13	16	15	18												
Social objectives																										
influence the political structure							16	16	18	18	14	16	16	18	15	19	12	15	14	18	15	17	16	17	15	16
influence social values							34	33	34	32	28	33	30	38	31	40	27	34	36	38	30	35	31	36	31	35
help others in difficulty	68	61	62	58	59	56	66	63	65	66	63	63	67	69	64	68	61	65	66	70	63	68	65	70	66	70
be involved in environmental cleanup											43	40	45	45	34	38	26	30	29	32	28	30	29	32	28	28
participate in community action									29	25	26	28	29	33	31	36	28	32	30	35	29	32	29	34	29	30
promote racial understanding																							36	46	34	42
keep up with political affairs	58	59	51	52	52	51	51	52	53	56	43	42	49	48	42	46	37	40	39	42	31	38	40	42	37	37
join the Peace Corps or Vista	13	12	19	9	18	9			20	11	16	11	16	12												

T = CIRP Norms Participants, A = Adult Participants

Table 41 (continued)

Objectives Considered to be "Essential" or "Very Important" for All Institutions, by Year and Student Type (Traditional and Adults)
(in percentages)

Objectives	1966		1967		1968		1969		1970		1971		1972		1973		1974		1975		1976		1977		1978	
	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A
Family objectives																										
raise a family							71	74	68	75	60	65	65	68	56	62	55	69	57	62	57	59	59	60	62	63
marry in the next 5 years									29	17	30	21	34	30												
Business objectives																										
be very well off financially	44	42	44	38	41	35	44	39	39	34	40	36	41	37	55	48	46	41	50	42	53	43	58	47	60	47
be successful in my own business	53	49	46	39	45	39	46	39	44	38	42	38	45	41	42	37	39	35	44	38	45	38	47	40	48	39
be an expert in finance	20	18	12	15	10	13	17	18	16	16	14	15	16	16												
Personal objectives																										
develop a philosophy of life			83	81	82	82	82	83	76	78	68	72	71	77	69	77	61	71	64	74	61	71	59	71	56	69
become an outstanding athlete	21	7	14	5	12	5																				
not be obligated to people	28	34	25	27	24	26	24	28	23	26	21	26	23	29												
have an active social life							54	47	57	50	55	40	59	45												
have friends different from me							66	58	63	56	60	51	63	58												

N = CIRP Norms Participants
A = Adult Participants

When offered, three objectives were initially important to adult students, but decreased in importance by 1978: to "keep up with political affairs," to "develop a philosophy of life" and to "raise a family." These objectives declined in importance, dropping suddenly in 1971.

Conversely, to "help others in difficulty" ascended in importance to adults through 1978. Apparently, adults began to reprioritize their goals for attending college at the turn of the decade.

Important Objectives for Traditional-aged Students. Within the eleven consistently presented objectives, the importance of goals for traditional-aged students was quite similar to those of college attending adults. To "be an authority in my field" and to "help others in difficulty" remained consistently important to traditional-aged students, while to "keep up with political affairs," to "develop a philosophy of life," and to "raise a family" declined in importance.

These trends seem to reflect a more pragmatic, less altruistic attitude on the part of traditional-aged students, as both political idealism and the labor market opportunities declined in the 1970s. However, the goal, to "develop a philosophy of life," was generally more important to adults than traditional-aged students, perhaps reflecting less vocational (or more consumer-oriented) goals for adults who attend college.

Least Important Objectives for Adult Learners. Of the eleven choices available in most of the thirteen years, the least important objectives (those with a response rate of 20 percent of less) for adult students were: to "achieve in a performing art," to "write original works," to "create artistic works," and to "make a theoretical contribution to science." Many adults probably felt it was too late for them to attain such goals. It is doubtful that adults would go back to school in order to achieve such creative goals anyway -- even though the goal may be important to them personally. That is, there are many non-college-related programs in most communities which enable adults to partake of the creative arts.

Other objectives which were important to adult students (when presented), perhaps for the same reasons, were: to "perform or compose music," to "influence the political structure," to "join the Peace Corps or Vista," to "be an expert in finance," and to "become an outstanding athlete." "Becoming a community leader" was important for adult students in four of the seven years it was presented. To "marry in the next five years," was unimportant in one of the three years that it was available as a choice, probably because more adult than traditional students were married already.

Least Important Objectives for Traditional-aged Students. Except for the goal to "marry in the next five years," unimportant goals for traditional-aged students were similar to the low adult response ranges. To simplify interpretations, the goals from the CIRP questionnaires can be grouped into the following general categories: artistic objectives; status objectives; social objectives; family objectives; business objectives; and personal objectives.

Artistic Objectives. None of the four types of artistic goals were selected by more than 20 percent of adult or traditional-aged students in any year. Although the artistic objectives were selected by slightly more traditional-aged respondents than by adult respondents in the 1960s, in the 1970s slightly more adults selected to "create artistic works" and to "write original works." Only to "achieve in a performing art" was consistently a more important objective to the traditional-aged student.

Status Objectives. In 1966 and 1978, the status goals of both traditional-aged and adult students remained stable, with fluctuations in intervening years. Of the status objectives, to "be an authority in my field" was important for about 70 percent of the adult students. As noted before, the least important status objective for adults was to "make a theoretical contribution to science."

All of the status objectives seemed to decline in importance in the late 60s (1968) and started to rise again in the early 70s. By 1978, most of these status objectives returned to the same level of importance as in 1966. Of course traditional values were questioned on campuses across the country between 1968 and 1970.

To "obtain recognition from colleagues" was the only status objective which consistently was more important for traditional-aged students than for adult students. To "be an authority in my field" was less important for the traditional-aged students until 1974 when it became just as important or a more important objective for the traditional-aged students than for the adult students.

Social Objectives: To "help others in difficulty" was the most important social objective for adult students. Nor surprisingly, their least important social objective was to "join the Peace Corps or Vista." To "help others in difficulty" was more important for traditional-aged students in the 60s and for adult students in the 70s. Other goals which were consistently more important to traditional-aged students than to adult students (when offered as choices) were to "influence social values;" to "influence the political structure;" and to "join the Peace Corps or Vista."

Family Objectives. Not surprisingly, to "raise a family" was a more important family objective for adult students, while to "marry in the next five years" was more important for traditional-aged students.

Interestingly, to "raise a family" has decreased in importance over time, and to "marry in the next five years" has increased in importance over time, reflecting trends in American society wherein birthrates have declined and divorce rates have increased.

Business Objectives. To "be successful in my own business" was the most important business objective for adult students in the 60s, as was to "be very well off financially," which was important in the 70s. To "be an expert in finance" was the least important business objective for adult students and traditional-aged students (when presented).

However, all of the business objectives were more important for traditional-aged students than for adult students (except "to be an expert in finance"). Adults probably had already achieved in business or were resigned to study for enjoyment rather than career reasons. The only business objective which increased in importance over time for both groups of students was to "be very well off financially." Clearly, this reflects the difference in the U.S. economy between the 60s and 70s. Business goals were thought to be automatic in the 1960s while in the 1970s they became more of a concern.

Personal Objectives. To "develop a philosophy of life" was the most important personal objective for at least 70 percent of the adult students nearly every year it was offered, while to "become an outstanding athlete" was the least important.

All of the personal objectives were more important to the traditional-aged students than to the adult students, except for to "develop a philosophy of life" and "not [to] be obligated to people." The personal objectives have generally declined in importance over time for adult students.

In general, adults who enrolled in colleges and universities shared a substantially similar range of objectives with the traditional-aged student population. Most of the differences are to be expected, easily attributable to age or to the possibility that some objectives offered are not central to the missions of the higher education system. However, a remaining question is whether institutional changes would attract more adults--adults who might consider the traditional set-up to be so full of barriers, or so oriented to the 18-to-21-year-old, that they do not enroll.

Multivariate Analysis. In order to determine which adults were most interested in certain broad categories of life goals, multiple regression analysis was utilized (Table 42). Four groups of goals were identified for regression analysis: artistic, status, social, and business goals. Two other groups, personal and family goals, were excluded since the relevant questions were not asked in enough years. Interest in each of the four broad groups of goals for each respondent was calculated as the average value (where 4 = essential, 3 = very important, 2 = somewhat important, 1 = not important) of responses for all the questions falling under that category (that is, artistic goals included the desire to "achieve in a performing art," to "write original works," and to "create artistic works." To "perform or compose music" was excluded since that option was not available after 1968). Table 41 indicates which goals fall under each broad heading. The four goals represented the dependent variables in separate regressions run for respondents from 1966, 1970, 1974, and 1978. Independent variables included personal and socioeconomic characteristics, type of institution attended, enrollment status, and major.

Artistic Goals. Adult women, younger adults, and those adults from higher SES backgrounds (as measured by mother's education) were the most likely to have artistic aspirations. Sex differences regarding this goal get smaller over time, and the SES effect gets somewhat stronger. The regressions

Table 42
Correlates with Life Goals

		Artistic				Status				Social				Business			
	Year	1966	1970	1974	1978	1966	1970	1974	1978	1966	1970	1974	1978	1966	1970	1974	1978
Variable	R^2	.1386	.1159	.1245	.1322	.0954	.0892	.0690	.0781	.0346	.0443	.0961	.0845	.1351	.1362	.0961	.1067
Full-time			*	.059			*	.042			*	.041			*	.036	
Part-time			*	.017	-.029		*		-.031		*		-.034		*		.059
1st time, full-time			*		-.020		*	.021	-.020		*		-.019		*	.025	
All two-year			-.056		-.048				-.091								-.025
All universities											-.030						
Black colleges						.063	.043	.076		.037		.062		.048	.041	.074	.026
Public two-year		-.032		-.049		-.039	-.085	-.045		-.115	-.069	-.078	-.082				
Technical				*	*		.038	*	*			*	*			*	*
Public four-year		-.038							-.024	-.051			-.028	.030			
Private four-year		.048		.018	.028		.026							.047	.030		
Protestant four-year			-.031	-.022									.032		-.027	-.033	-.022
Catholic four-year				.016				.023				.024					
Public universities					.032					-.092							
Private universities		.031				.029		.018									
Black public				.051													
Sex (female = 2)		.064	.041	.033	.027	-.234	-.219	-.087	-.100				-.031	-.235	-.189	-.112	-.098
Age			-.035	-.053	-.046		-.044	-.021	-.047						-.062	-.043	-.070
Marital status (married = 2)*			-.049	.054	-.065		*			*	-.030			*			-.028
White			-.027				-.036	-.018		.044	-.047	.079		-.039	-.076	-.030	
Black				-.030			.051		.038		.056	.040	.021		.045	.031	.075

* = Not available this year.
Blank = Not significant.

Table 42 (continued)
Correlates with Life Goals

		Artistic				Status				Social				Business			
	Year	1966	1970	1974	1978	1966	1970	1974	1978	1966	1970	1974	1978	1966	1970	1974	1978
Variable	R2	.1386	.1159	.1245	.1322	.0954	.0892	.0690	.0781	.0346	.04[illegible]3	.0961	.0845	.1351	.1362	.0961	.1067
Mother's education		.028	.024	.036	.055	.045								.056			.020
Agriculture		-.035	-.046					.065	.066		-.035	.053	.048	.031		.048	.056
Biological sciences		.013		.015	.021	.049		.109	.112		-.040	.085	.078		-.044	.046	.039
Business		-.055	-.086			.064	.049	.181	.242		-.050	.160	.210	.160	.124	.251	.305
Education		.010		.051	.066	-.019	-.029	.085	.117	.066		.144	.168		-.066	.035	.070
Engineering		-.062	-.062			.071		.119	.154	-.042	-.090	.064	.091	.070		.098	.115
English		.124	.053	.097	.102	-.019	-.026	.027	.038			.060	.070	-.042	-.042	.022	.030
Arts		.287	.274	.273	.286	-.003		.087	.098			.085	.105	.057		.104	.120
Health		-.035	-.064	-.016		.042	.031	.155	.196	.032		.197	.227		-.083	.036	.053
History		.032		.030	.033		-.026	.078	.084	.069	.062	.159	.160		-.023	.050	.043
Humanities		.050	.047	.067	.082			.055	.056			.108	.114	-.050	-.072		
Math						.033		.042	.028		-.035	.022	.025		-.025	.021	.019
Physical science				.015	.026	.066	.031	.071	.085			.047	.052		-.028	.017	.022
Preprofessional				*		.051	.056	*	.097	.050	.027	*	.088	.109	.048	*	.069
Social science		.063		.058	.059	.041		.138	.160	.101	.080	.220	.244		-.081	.049	.078
Technical								.125	.136			.104	.107	.048		.117	.106
Non-technical				.074	.080			.136	.138			.150	.159			.107	.101

* = Not available this year.
Blank = Not significant

1966 N = 5,981
1970 N = 7,819
1974 N = 17,392
1978 N = 12,479

clearly indicate that those attending two-year colleges, particularly public ones, were less artistically motivated than other adults. This also seemed to be the case for adults in Protestant four-year colleges in 1970 and 1974. On the other hand, adults in private liberal arts colleges (other than Protestant ones) were more motivated toward artistic achievements than most other adults in college.

A causation problem arises when attempting to interpret differences by type of institution attended. It might be that two-year colleges are unattractive to adults with artistic interests, and if they improved offerings in this area they could attract more students. Or it could be that adults with artistic interests prefer the liberal arts college environment, and hence do not or would not utilize whatever artistically-oriented programs two-year colleges offer. Further analysis is needed here.

As would be expected, adults who major in education, English, arts, history and other humanities and social sciences are more likely than others to stress artistic achievements.

Less expected is the indication that in recent years, biological and physical science majors were also more likely than others (e.g., agriculture, business, engineering, health and preprofessional majors) to seek achievement in the arts. Hence, it appears that institutions which allow science majors to partake of artistic experiences as well as science courses may be attractive to adults in science fields. This might reflect the more diverse goals of students who return to or begin college after the traditional college-going years.

Status Goals. This category refers to scholarly accomplishment and to leadership attainment. These objectives were more important to adult men than to adult women, although sex differences decreased over time. Young adults and blacks were more interested in status as defined here than were older people and whites. The racial difference was further emphasized by the fact that those who attended black colleges were more interested in status objectives than those who attended other types of institutions. Status did not seem to be important for adults who attended public two-year institutions.

In recent years, adults in most of the major field categories seemed to desire status achievements (when compared to those undecided about their majors). The strongest major-status links were revealed among business, engineering, health, social science, technical, and nontechnical majors.

Social Goals. This category refers to a set of activities concerning helping others, and with political and social involvement to solve contemporary national problems. Although no differences were revealed by age or SES, white and black adults generally seemed somewhat more interested in these types of activities than other ethnic groups. Again these activities seemed to be relatively unimportant for adults who attended two-year colleges. Social science, health majors, and surprisingly, business majors (in the later 70s) were most interested in social goals. The variables included in the regressions did not differentiate much among adult students in their interest in social goals.

Business Goals. Although women appeared to be less interested in being well-off financially and in business ownership than men were, these differences seemed to have decreased over time. Younger adults had stronger aspirations regarding financial achievements, and blacks, particularly those in black colleges, were more motivated in this regard than whites were. Those adults who attended Protestant colleges were less likely than others to be concerned with business achievements.

As would be expected, business, engineering, and technical majors had the strongest business orientation; however, arts majors also expressed relatively strong motivation in this regard.

Finally, we looked at differences in objectives of part-time and full-time adults in two years: 1974 and 1978 (Table 43). With a few exceptions, full-time adults were more likely to aim for all the goals on the list. However, the differences were not large enough that the overrepresentation of full-time adults affected the aggregate results described so far. Two objectives were more important for part-timers: "raising a family" and "having administrative responsibility for the work of others." The greatest difference was that part-timers were more interested in raising a family, which probably explains why they attended part-time. Many of those part-timers who were interested in having administrative responsibility for the work of others, probably were attending college to gain promotions in their work. What is very clear is that full-timers were more interested in the more idealistic objectives.

Table 43

Objectives Considered by Adult Respondents to be "Essential" or "Very Important", by Enrollment Status and Year
(in percentages)

Objectives Considered to be Essential or Very Important	Enrollment Status and Year			
	1974		1978	
	Part-time	Full-time	Part-time	Full-time
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	7	10	7	11
Becoming an authority in my field	55	64	60	71
Obtaining recognition from my colleagues for contributions to my special field	35	41	37	46
Influencing the political structure	11	16	11	16
Influencing social values	29	35	31	36
Raising a family	66	58	70	61
Having administrative responsibility for the work of others	31	29	38	25
Being very well off financially	41	41	48	47
Helping others who are in difficulty	61	67	66	71
Making a theoretical contribution to science	12	18	12	18
Writing original works (poems, novels, short stories, etc.)	10	15	12	17
Creating artistic work (painting, sculpture, decorating, etc.)	16	18	16	18
Being successful in a business of my own	30	37	33	40
Becoming involved in programs to clean up the environment	25	31	22	30
Developing a meaningful philosophy of life	66	72	67	70
Participating in a community action program	28	33	26	31
Keeping up to date with political affairs	37	41	31	39
Promote racial understanding			36	44

Summary. Regarding life goals, there appeared to be significant sex and racial differences in motivations. Moreover, adults in two-year colleges seemed to be less motivated to achieve in any of the stated areas. Under one set of assumptions about causation, namely that type of college can affect life goals, it would be worth developing policies to encourage adults to attend four-year rather than two-year institutions. If that were the case, adults might develop stronger motivations to accomplish things of social and individual value.

Cyril Houle, in his book The Inquiring Mind, (1961), distinguishes three types of learning orientations: the goal-oriented, the activity-oriented, and the learning-oriented. The goal-oriented individual is motivated by accomplishing fairly clear-cut objectives, i.e., those which are vocational in nature. The activity-oriented are those who "take part because they find in the circumstances of the learning a meaning which has no necessary connection, and often no connection at all, with the content or the announced purposes of the activity" (p. 16). They could be motivated by loneliness, escape from a personal problem or an unhappy relationship, the completion of a degree, etc. And finally, the learning-oriented seek knowledge for its own sake. Learning for them is a constant rather than a continuing activity. Even though Houle calls attention to the differences between these three learning orientations, he stresses the fact that "no one of the three orientations is, after all, innately better than the others" (p. 29). All of the adults are continuing learners. Differences among them are just a matter of the emphasis they place on the purposes and values of adult education.

Evidence on declining differences by sex in life goals leads to the inference that, over time, adult women who return to school will be seeking programs and services more similar to what men have sought in the past. For example, women probably will be more anxious to attend substantive courses rather than courses related to hobbies and other consumption activities. And it also seems clear that black adults who return to college form a highly motivated group which can be further represented as a source of new students in the future.

Chapter VIII

Implications of the Study

This study deals with the largest sample ever assembled of adults in college: namely, the 172,400 first-year students over the age of 21, who responded to the Cooperative Institutional Research Program's freshman survey between 1966 and 1978. Although the sample overrepresents full-time adults and four-year college students (as opposed to part-timers and two-year college students), findings have been presented so that differences between these groups can be discerned. In addition, comparisons are made with a nationally representative sample of traditional-aged students.

This section of the report attempts to draw out some of the policy implications suggested by the data analysis. Although many of these recommendations are not new, this report is one of the few places where a large-scale data base lends (or denies) support to what has been suggested. Our analysis was presented in six parts: demographics, college choice, the financing of college education, preparation for college, college plans, and life goals. The results from each section of the study lead to a number of implications.

How Colleges Should Accommodate New Clients

Since more and more adult women are returning to college, ways to facilitate their attendance must be considered. In particular, a large number of these women are returning as part-timers. If it is true as for younger more traditional-aged students, part-timers generally get less out of college than do those who attend full-time, new approaches to part-time education will be needed so that these students can get as much benefit as possible from the college experience. At the same time, it is important to find out whether barriers to the full-time attendance of adults, particularly women, exist and whether these barriers could be removed by explicit actions on the part of the institutions or of various levels of government. Specific institutions or programs where adults attend full-time or where part-time adults benefit highly from their experiences should be identified and factors leading to these conditions should be isolated. Finally, whether these conditions can be transferred to other institutions should be considered. Other institutional barriers confronting all adult students and women in particular include: admissions procedures, university regulations and policies like residence requirements and especially the provision of student aid (H. Astin, 1976).

Increases in the attendance of married women in recent years suggest, among other things, that certain institutions have been able to make it easier for women with traditional responsibilities to go to college. In-depth analysis would reveal whether day-care facilities, transitional and counseling programs, and other services, or nontraditional course scheduling have facilitated this trend.

As the adult college-going population grows older, special consideration must be given to their needs. Colleges and universities that have effectively served people in their twenties are not necessarily the ones that will be most effective for older returnees. Moreover, as older adults become interested in college attendance, greater concern for their admissibility is necessary. While adults are prone to matriculate at open admission, public institutions (The College Board, 1980), the utility of high school grades and test scores for admissions decisions at moderately or highly selective institutions is likely to be very limited. Specifically, older persons will have lower grade-point averages due to grade inflation in recent years. Adjustments for this factor must be made.

Since more and more of the adults in college have attended previously, concern for the transferability of previous courses for degree credits is necessary. Problems of the validity of courses taken many years earlier will have to be addressed. On the one hand, a physics course of 1950 might only be equivalent to high school physics today. Yet when courses can be equated, particularly courses in the humanities where Shakespeare's plays, for example, have not changed, perhaps arbitrary time limits for retention of credit should be removed. If the prediction is true that the numbers of traditional-aged college attenders are declining, then certain institutions, because of their need for bodies, may find it advantageous to force students to repeat courses that they have already taken, thus generating course enrollments and budget subsidies. Such temptations should be resisted, since colleges that do not impose such requirements will almost certainly be more attractive to adults seeking degrees.

It is clear that the proportion of minority-group members who enrolled in college was higher among adults than among traditional-aged students. Yet many minority-oriented programs are aimed at traditional-aged students. Exceptions to this generalization should be identified, and their effectiveness evaluated.

If most adults select two-year colleges, the hopes expressed by four-year institutions that adults will make up for the declining number of college-bound 18-to-21-year-olds will be unfulfilled. Moreover, traditional-aged students in the two-year college sector apparently benefit less from the college experience than do those in four-year institutions. This may be irrelevant for adults; organizations like the American Association for Community and Junior Colleges claim that adults want programs with a future and the four-year college curriculum does not answer this need. Adults have a vocational orientation which causes them to seek out two-year and community colleges. Moreover, two- and four-year colleges might be designed to meet different goals: e.g., two-year colleges could be geared toward meeting immediate goals and four-year colleges toward meeting long-range goals.

Adults perceived a narrower range of choices available to them than did traditional students. The major constraints on adults were cost, location, and program. If a low status sector is perceived by working adults to be all that is available, this may explain their low use of tuition remission programs. Hence senior institutions must make greater efforts to give their students financial aid and work opportunities. Course offerings may have to be adjusted with respect to time and method of delivery, as well as content, if adults are to be attracted.

While acknowledging that for many institutions, the most promising way to maintain enrollments will be to identify and serve new kinds of students, Mayhew (1979) points out a number of dangers and pitfalls.

> The first of these dangers is that if new students are served on the campus itself, their very presence could so alter the character of the institution that, in the long run, it might lose its appeal to its traditional clients. Chatham College has created programs in management and communications for adult women that are quite popular. The proportion of total enrollment that is composed of these women has grown and could grow still larger. However, the women of traditional college age on campus have begun to resist the presence of larger numbers of older women on campus. Should that resistance intensify, it could produce an enrollment crisis in the group of women aged eighteen to twenty-two. For this reason, in all except the quite large institutions, programs for new kinds of students might better be conducted off campus, or at night, or in the summer, so that participants will not mingle with the traditional students. The charm of the idea of integrating new and traditional students and using underutilized classroom space and faculty time is offset by the dangers of changing, for the worse, the public image of the institution. (p. 183)

Of course, there are other reasons to separate programs for adults from regular campus activities, in particular, convenience to the geographic and timing needs of adults. In the late 1950's, during the debates over evening colleges, it was argued that adults benefitted most from separate programs that could cater to their special needs (McMahon, 1960). At the same time, the problem of how to prevent the downgrading of the educational experience by separating programs for adults must be considered. Tenured faculty may not want to teach off campus or at odd hours, or they may resist attempts to develop new curricula, even if enrollment declines are the alternative. The temptation is to hire adjunct or part-time faculty to teach adults off campus, because they are much less costly, and this practice could seriously alter the quality of programs (see Solmon, Ochsner & Hurwicz, 1979).

Another of Mayhew's (1979) cautions is particularly relevant to institutions attempting to cultivate a new adult clientele. He warns of misjudging the potential market for new programs. Since many adults are already attending college, additional older people must be attracted in order to compensate for the declining pool of traditional students, and these people might be harder to convince about the worth of attending college. Since more high school graduates have attended college since the 1960s than previously, college will lose some of its lure for adults wanting to make up for previous disadvantage. Breneman and Finn (1978) caution, "And because adult enrollments are vocationally driven, as the economic value of a college degree declines, as seems likely, motivation to earn the degree will also decrease" (pp. 154-155). However, the long-term economic value of college degrees is still uncertain but may improve. Thus, attempts to redesign institutions in order to attract adults must be worked out carefully.

Academic reputation was a very popular reason given by both adult and traditional-aged students for selecting their particular colleges.

This reason dominated both over time and across institutional types, which was surprising because adults most often attended two-year colleges not generally viewed as academically superior to other types of colleges. It could have been that students were either making comparisons with other nearby colleges with equally low, or lower reputations, or "good academic reputation" could have been interpreted in ways different from the interpretations used in many national ranking studies (for example, a college known to have a good auto repair program might be viewed by some students as having a good academic reputation). Cross (1978) says: "If that 'missing link' can be supplied [between learners and resources], the learning society can be a reality" (p. 43). If this is true, colleges--particularly those that offer superior programs--should make special efforts to inform potential adult clients of what they have to offer. For example, do adults know what choosing a nearby two-year college will mean to them in ten or fifteen years? Again, those people affiliated with two-year and community colleges feel that national information on selectivity are not useful to adults because adults' sources of information on quality are very different from those used by traditional-aged students. They believe that adults know the quality of local colleges and programs, just as they are aware of the real and unreal possibilities facing them.

Although we can list many barriers facing those adults considering a return to college, probably the most interesting (and most complex) ones involve finances. To understand the financial situation of adults, several issues must be addressed, particularly the true costs involved and the sources of funds available to adults, and the effects of financial constraints on their choices. In most cases, adults base their decision to attend college on a different set of cost considerations than that used by students of traditional college age. If the adult is working, he or she may be forced to reduce time on the job and, unless paid educational leave is available, a reduction in income could result. Even high-level professionals may find their earnings reduced if they have to cut back on outside consulting activities to attend college. Although it might be argued that eighteen-year-old high school graduates also forego earnings if they attend college, the burden of this cost is probably higher for the older student who has fixed expenses (such as mortgage payments) which the younger student is unlikely to incur. Moreover, adults with young children are faced with the additional costs of child care when they must be away from home to attend classes. Hence, it is important to know the extent to which adults delay entry or re-entry into college until these costs are reduced (e.g., when the children are grown and the house paid for).

Some observers argue that, to maximize adult access to institutions of higher education, tuition for adult students should be kept as low as possible. Institutions must provide education at costs that both the students and society can afford (Boyer, 1975; Fuller, 1978), and per-course fees should be equalized for part-time and full-time students (Bishop & Van Dyk, 1977; O'Keefe, 1977), unless, as mentioned previously, there are real differences in the costs of providing the services.

Of course, if there were ways for adults to cover the costs of attending college, the burden of these costs would be reduced. And it might be argued that adults have more sources of support than do younger students, since more adults have jobs, the ability to borrow from banks, and years in which to accumulate savings.

The justification for subsidizing adults who attend college is complicated. If the benefits sought from college are private (that is, if they accrue only to the student and not to the larger society), many economists would argue that public subsidy is unwarranted. And most job-related benefits, as well as leisure-time or consumption benefits, are clearly private gains. If, however, a college education is considered a national entitlement (i.e., adults who were denied financial support earlier when they would have been eligible have a right to that aid later in life), or if the college education of adults is viewed as benefitting society (by increasing socioeconomic mobility, enhancing national productivity, and changing values, attitudes, and behavior in socially desirable ways) then the availability of financial aid to adults becomes a major concern. Therefore before we can discuss the adequacy of financial aid for adults, a discussion of their goals and of the results of their attending college is in order.

It was found that, although most adult freshmen express at least some concern about financing their education, part-time adult students are significantly less likely to express such concern than are those enrolled full-time. Not surprisingly, blacks and adults from poorer families had the most concern about financing their college educations, and adult women and younger adults (22-to-25-years-old) displayed more financial concern than men and older adults did.

The major sources adults used to finance their educations differed from those of traditional-aged freshmen. Whereas traditional-aged students tended to rely on family aid and savings from part-time or summer employment, adults tended to rely on personal savings, military benefits, or regular employment. Adult undergraduates were also much more likely than were their traditional-aged counterparts to borrow in order to finance their college educations.

Most adults must work to pay for college. Unless colleges at all levels, but particularly the four-year institutions, are willing to adjust to this need, their attractiveness to adult students will be limited. In particular, regular courses will have to be offered at times when working adults can attend. This factor is clearly important in explaining the lure of the community colleges for adults. Yet excessive work obligations may limit the impact of college on adults, and so, the possibility of offering nonwork aid must be reconsidered.

Adults had better access to federal aid programs than we expected. Yet their higher basic living costs limit the effectiveness of aid programs, especially in terms of their choice of college and their persistence in college. The needs tests for adults may have to be different from those for traditional students. It is important to know how adults would be affected by alternative treatments of ability-to-pay calculations. One example is independent student status: Should married students be able to declare themselves independent of spouse for aid eligibility purposes.

GI Bill assistance has greatly helped many adults returning to college. The effects of the declining availability of such aid must be further analyzed. Moreover, subsidized loan programs are more appealing to adults than to traditional students. The recent elimination of income limitations on certain loan programs may be particularly useful in encouraging adults to return to and remain in college. How recent changes in eligibility requirements for loan programs affect adult attendance is a question that should be monitored carefully.

Specific proposals for financing the education of adults include turning the Basic Educational Opportunity Grant program into an entitlement program by allowing those traditional students eligible for financial aid, but who choose not to go to college immediately, to use the aid at any later point in life (Bishop & Van Dyk, 1977). This proposal poses some problems, which underlie the difficulties adults have in getting financial aid. If BEOGs are provided to aid the needy, how can we justify use by adults whose financial position has greatly improved since their teen-age years.

Another problem is that students must attend college at least half-time to qualify for BEOGs. Those adults who attend less than half-time are ineligible for aid. Should this particular provision of the program be changed? The variation in institutional and federal definitions regarding less than full- or part-time status will also need to be addressed. Another question that remains unanswered is: Do adults not receive aid because they do not qualify for awards, or because they do not know about programs for which they are eligible? If the problem is lack of information, some solutions are obvious.

So far, we have only touched on a major element in the financing of college by adults. Most policy assumes that adults who work clearly have a revenue source to cover at least part if not all of their education expenses. However, if employed adults who return to school are used to spending (or need to spend) most of their current earnings, then their normal salaries may not cover the additional expenses of education, unless they change their living standards. For these people, the problem of finance may simply be one of increasing demands on adequate financial resources and something like a mortgage payment deferrment program might help. For others, the unemployed, who may be at rock bottom financially, this may be the very reason they are returning to school, despite unemployment regulations which make college attendance illegal in the collection of benefits. A related issue is "independent student" status. A married person may not be able to use a spouse's earnings to pay for college. The question is: How much of an adult's (or spouse's) salary can reasonably be viewed as a source of funding for college?

Another set of issues regarding education-work links for adults involves who works at what and the impact of occupation on education choices. Only by comparing the nonattenders with adults in college, can we see whether the unemployed homemakers or working adults are more likely to attend. Other questions arise: Is job level related to propensity to attend? Are men more likely to be working while in college than women are? What are the work experiences of adult students--including on-campus/off-campus jobs and number of hours worked? Do jobs constrain adults in their choice of institutions? Is the necessity to work a major reason for attending part-time? If so, do part-time attenders work full-time or part-time? What job-related differences are evident when part-time and full-time adult students are compared?

Perhaps the most vital set of issues related to the financing of education for working adults involves opportunities to participate in paid educational leave and for tuition remission programs sponsored either by the employer or by a labor union (see Charner, 1980).

Burkett (1977) has suggested that organized education be subsidized by outside agencies such as private philanthropic, state, and national foundations; so far, most major efforts in this direction seem to come from the corporate sector. Other proposals for increasing adult participation in higher education include tax allowances (Boyer, 1975; O'Keefe, 1977) and a depreciation allowance for job obsolescence (London, Wenkert, & Hagstrom, 1963). (Tuition tax credit proposals have not done well in the Congress despite their popularity with various groups.) Yet most adults who already have access to employer-subsidized tuition remission plans have not taken advantage of them. Willard Wirtz (1979) believes that such programs may represent an economical way to meet part of the employee development costs and also be valuable to educational administrators whose largest concern has been about current and prospective declines in enrollment. Therefore he says, "there is both curiosity and concern about the apparent gap here betwen opportunity afforded and opportunity taken" (p. 2). Others also notice that tuition aid is a significant "untapped resource " (Charner, Knox, LeBel, Levine, Russell, Shore, 1978). Whether paid educational leave which would eliminate or reduce opportunity costs of tuition remission programs, would get more takers is uncertain. And the willingness of many employers to develop such programs is questionable. In some cases, unions might bargain for such fringe benefits, but the cost of these programs would be huge.

Providing educational leave from jobs or subsidization by employers has also been suggested as a means of updating job skills, increasing worker morale, and so forth (Eide, 1973; Sheats, 1965). Of course, there is a difference between college attendance and formal or informal programs offered by employers. Many firms believe that they can provide relevant information more cheaply in-house than by sending workers back to school. The GI Bill of Rights for veterans confirms the positive effects of subsidizing educational undertakings. For example, subsidies substantially increased the educational attendance of Vietnam veterans. Previously, men in the armed forces were less likely to attend college because they were already undergoing on-the-job training, and the free correspondence schools available to them did not fit the census definition of "school attendance." The question arises, however: Should a returning 21-year-old veteran who enlisted after high school and then went on to college after two or three years in the armed forces be viewed as an adult in college or as a slightly delayed traditional student?

Subsidization of both formal and informal educational activities by employers and others must be critically examined. If adults return to education for job advancement, the question of the duration or persistence of the benefits of the endeavor is important. The fifty-year-old who returns to college for job advancement, will benefit for only fifteen years or so. The teenager who goes to college, will be working for forty-five years or more. Hence, the benefit/cost ratio is higher for the younger person. Similarly, as workers get older, the employer's incentive to subsidize their further education declines.

In other countries, employees usually stay with one employer for their whole working careers, but in the United States, when the employer provides job-related training, workers will tend either to demand salary increases or to leave for other jobs. Hence, the lack of firm loyalty discourages employer subsidization. Further study is necessary to get a better idea of the full range of learning activities in which adults participate (particularly those outside colleges) and to see whether those who use other training methods are more or less likely than others to be attending college.

In some ways, the value (with respect to job advancement) of returning to college depends upon a person's field of study. The skills of engineers become obsolescent more quickly than those of some other workers. Thus, their skills may need periodic retooling. But most engineers eventually move to administrative posts, so it might be cheaper to hire newly graduated engineers than to send those with obsolete skills back to school. Perhaps engineers needing their skills updated should go back to business schools instead.

The basic question here is: How prevalent is employer subsidy, paid education leave, and tuition remission? Similarly, to what extent do unions assist their members to return to college: Are workers in union-sponsored courses encouraged to take courses oriented toward union policies and activities? Does subsidization of educational activities by employers differ for older and for younger workers? Does such subsidization depend on a person's field of study and occupation? Are differences in participation rates by age, field, and other variables due to differences in the employee's interest in or knowledge of the programs?

Finally, policy-makers must know what proportion of working adults are eligible for employer subsidies. Why do many adults not take advantage of these programs? How many do not even know about the programs available to them through their employers or unions? Is knowledge of or participation in such programs dependent on job level or other personal and prior educational characteristics? These are difficult questions to answer.

It seems clear that adults who attend college come less well-prepared than do younger students. The only caveat here is that, although adults responding to the CIRP surveys were more likely than traditional students to say that they were less well prepared and need remediation, the two groups may not really differ. Perhaps both groups are ill-prepared, but the adults are more realistic; or perhaps adults are as well prepared but lack the self-confidence.

Another avenue to pursue with respect to the relative preparation of adults and traditional-aged students is to develop mechanisms for reality testing. Institutions should not rely upon adults' own perceptions or upon stereotypes. And even competency tests such as the SAT may be misleading, both because they may have built-in biases and because highly able adults may not have as much experience in dealing with these tests as recent high school graduates do. Perhaps personal interviews coupled with recognition of the value of earlier experiences, might enable better assessment of the preparation and capabilities of older applicants. Nevertheless, remediation may be crucial, just as a more careful consideration of requirements, prerequisites, course loads, and course contents are. Institutions may have to choose between attempting to bring adults up to generally accepted standards, and changing these standards to make them more consistent with the purposes adults have for returning to college. But there is some fear that changed standards will end up as lower standards. Although changing standards may be easier and more appealing to this potential clientele in the short run, the former may yield greater payoffs over time. Additionally, as adults indicate their interest in and concern for program quality as a major factor in matriculation decisions, lowering standards would be counter to the best interests of the institution and their adult students. The goal of adult degree programs and federal policy, obviously is not to create a two tier structure for degree quality. Who should pay for the efforts to deal with poorly prepared adults in college is a vital economic and educational issue. But ignoring the problem of lack of preparation, if it does exist, will both limit adult enrollments and minimize the benefits for those who do attend.

A major factor in the college choice of adult students is that they must usually live at home. This situation may not be immutable: Adults might be willing to live on or near campus if subsidized housing were more available to them. At present, however, most colleges cannot offer their adult students satisfactory housing, an unfortunate fact given the considerable evidence that traditional students benefit greatly from living on campus and the undeniable fact that adult students who live in off-campus housing (other than their own homes) must shoulder heavy financial burdens. As a result, adult students become immobile and are forced to attend colleges near their homes.

Since the degree aspirations of adults are somewhat lower than those of traditional students (perhaps merely because their goals are more specific to begin with, or their goal is not to attain a degree), colleges must be chary in extrapolating the upper division or graduate enrollments of adults from their attendance rates in the first year. Moreover, the possibility of developing programs to raise the aspirations of returning adults should be considered. Despite their initial disadvantages in preparation or self-confidence, some suggest that adult students are better prepared than their younger counterparts because they are prepared in other ways, that is, motivated to make the effort and ready to work -- more focused in their learning.

Our data clearly show that most adult freshmen are in college to make up for previous disadvantages or to get ahead in their careers. The data base does not include many members of the upper-middle class who are seeking leisure-time consumption activities, as is indicated by the preponderance of students choosing majors and careers in business to the exclusion of the humanities, in particular. Moreover, the adult students in the HERI data base have life goals centering on work and status rather than on leisure. Particular note of this finding must be taken by humanities departments who hope to solve their declining enrollment problems by replacing traditional-aged students with adults (Solmon, Ochsner, & Hurwicz, 1979). Moreover, colleges which hope to get adults into any major and then to redistribute enrollment-based incomes among departments must be prepared to open and expand their business program and firms should couch offers to employees of opportunities to return to school in terms of career advancement rather than leisure time activity alone.

Since virtually all research on college impact and on the value of a college education has concentrated on the traditional 18-to-22-year-old student, our notions of good educational policy and practice are based on this group, and we may have to revise these notions when evaluating higher education for adults, as is clearly demonstrated by the work of Alexander Astin. In Four Critical Years (1977), Astin concludes that (traditional-aged) students get more out of college if they "get involved":

> The fact that most measures of student involvement are associated with greater-than-average changes in entering student characteristics supports the hypothesis that many changes after college entry may be attributed in part to the college experience rather than to maturation. For certain outcomes, student involvement is more strongly associated with change than either entering freshman characteristics or institutional characteristics. There is, to be sure, some confounding of involvement with other factors. Students who live in college dormitories rather than at home, for example, tend to come from more affluent families and are more likely to attend four-year rather than two-year colleges. Nevertheless, involvement measures are strongly associated with many outcomes even after the effects of student and institutional characteristics are considered. Major findings for nine forms of involvement are summarized: place of residence, honors programs, undergraduate research participation, social fraternities, and sororities, academic involvement, student-faculty interaction, athletic involvement, involvement in student government, and verbal aggressiveness. (p. 220)

Adults usually do not get as involved during college as do traditional-aged students (particularly in nonacademic spheres). They live off campus rather than in residence halls. They are likely to attend part-time rather than full-time. They get less nonreturnable financial aid, take out more loans, and are forced to work off campus rather than as research assistants. They generally do not participate in extracurricular activities, athletics, or student government. They do not get pledged to fraternities or sororities. And they rarely have as much time to interact with faculty as do students who are "always on campus." Thus, some might argue that either we must be resigned that they will benefit less from the experience, or we must effect changes in our institutions of higher education to facilitate adult involvement (McMahon, 1960).

If the model of the traditional student is applied, it appears that adults are deprived of important learning experiences and will not develop the same high motivation to benefit from college that younger, more involved students have. Hence they will benefit less from college attendance. But why should the same model be used for adults and for younger students? The former enter college with different goals and motives than those of traditional students. Presumably, adults have already "grown up" and so do not need college to help them mature. Moreover, adults have to make greater sacrifices to attend college than do recent high school graduates. Thus, it seems realistic to assume that adults are less in need of the motivational benefits of involvement.

Moreover, adults generally are highly involved in the academic aspects of college. A recent study by C. Robert Pace (1979) seems to confirm this view. He finds that adult students exert a higher quality of effort than do younger students in library use, classroom or course learning, faculty contact, writing experiences and scientific laboratory work, but a lower quality of effort in a multitude of nonacademic or extracurricular activities. Thus, adults attend college to maximize their academic and intellectual gains rather than to gain a "whole life experience." Yet adults report more impact ("gains") than do traditional students in intellectual and personal development areas (Green, 1980). Nor should we assume that this attitude is wrong. After all, adults are usually busy with other types of noncollege activities: family, work, leisure. These arguments lead to the conclusion that efforts to restructure higher education so that adults can participate in the same ways as traditional students do may be misdirected, as well as costly and difficult to achieve. Nevertheless, as already noted, colleges should make certain changes to facilitate adult access, choice, and persistence and to ensure that from the college experience, adults get those benefits which they seek and which are socially desirable.

These adaptations become particularly important when we recognize the alternative forms of education available to adults. It must be stressed that the HERI adult sample includes only those adult students outside extension programs. This may explain why certain stereotypes of returning adults are not confirmed here. However, in anticipating a huge flow of adults into traditional curricula, colleges must be aware that extension, as well as informal learning settings of many types are their greatest competitors.

The literature on adults in education attests to the many different forms that the education of adults can take. Harrington (1977) points out that there are differences between adult education, continuing education, and extension. According to Harrington, adult education serves..."those who have completed or interrupted their schooling and are entering a college or university or are coming into contact with a higher education program after an interval away from the classroom" (p. xii). Continuing education, though often used as a synonym for adult education, is used by Harrington to refer to those returning to school to build on previous training. Extension covers both formal and informal activities of higher education, but it differs from adult education in that it applies to youthful students as well as to adults and is little used by private colleges and universities. Harrington therefore refers to extension as specific work of cooperative extension and of general extension divisions.

Others do not clearly distinguish between different types of education for adults. For example, Ziegler (1972) sees recurrent education as one possible future model for adult education. Recurrent education is seen by the Organisation for Economic Cooperation and Development (1973) as alternating incidental and lifelong learning with more organized and intentional educational opportunities. Gass (1973) believes that recurrent education is possibly the best hope for connecting careers, education, and the economic system.

The distinction made by some between education and learning becomes important here (Organisation for Economic Cooperation and Development, 1973).

Learning is seen as being necessary for survival and taking place in many situations. Education on the other hand, involves organized and structured learning activities confined to an intentionally created situation. Therefore, while learning can be part of the lifelong learning movement, education cannot because it occurs only at a very specific time and place. This distinction is questionable when applied to the adult population because adults are more likely than traditional-aged students to learn or become educated at many different types of educational institutions. Most see education as part of a broader endeavor included within the framework of lifelong learning.

The education of adults takes place in a variety of settings: e.g., formal colleges, informal reading, and courses offered by businesses, the military, the YMCA, churches and so on (The Advisory Panel on Research Needs in Lifelong Learning during Adulthood, 1978). As mentioned earlier, there is much literature on the evening college movement published during the late 1950s and early 1960s. Evening colleges are merely degree-granting colleges for part-time students (McMahon, 1960). The obvious characteristic differentiating the evening college from other colleges is the time when the classes are held. Another characteristic is its inherent function of providing higher education for part-time adult students who must spend daytime hours in other pursuits. These people may be seeking degrees or not. The evening college movement worked against preventing higher education from becoming an economic class privilege in America.

Specific proposals for alternatives to formal adult educational programs include the extended campus, the special adult degree, individualized study, external degree programs, summer school, the educational passport, the continuing education unit (CEU), and provision of educational leave from jobs.

Schlaver (1977) describes many of these alternatives. The external campus involves external study under existing curricula that leads to a traditional degree. With this alternative, adjustments are made in scheduling--time and place, residency requirements, and delivery systems. The special adult degree involves programs where objectives, curriculum content, and methodology meet the special needs and interests of adults. Most of these programs provide a broad liberal rather than vocational or professional education. Individualized study involves making learning contracts which apply to work as well as to study. Under this arrangement, the institution sponsoring the individual specifies a bare minimum of general requirements. External degree programs give specific attention to the evaluation of knowledge from experience rather than from course work.

Summer school and the educational passport (Harrington, 1977; Summerskill & Osander, 1975) have been suggested as alternatives for adult learning to augment the traditional educational opportunities available in formal educational institutions. The educational passport is an orderly record of achievements (i.e., credentials for the educational world) that can be presented, as a student moves through the educational system and the business world. Continuing Education Units (CEU) discussed by Harrington (1977) were recently introduced as a measure of participation in noncredit courses.

If they are to attract new adults to their programs, traditional colleges and universities must be aware of the efforts of their competitors in bringing education to older Americans. Three courses are open to them: They can make the necessary adaptation within their present contexts (assuming that they know what changes are necesssary); they can try to replicate what extension, noncollegiate, and informal settings offer; or they can remain as they are--valuable only to those adults who can cope with their demands. The choice of one of these courses will determine the impact of adults on our colleges and of our colleges on adults.

APPENDIX A

Table A-1

Reasons Noted by Adult Male Respondents as "Very Important" in Selecting This College, by Marital Status, Year and Sex (in percentages)

Reasons	Marital Status and Year					
	1975			1978		
	Not Married	Married, living with spouse	Married, not living with spouse	Not married	Married, living with spouse	Married, not living with spouse
Relative/parent	6	4	7	5	2	9
Friend	11	11	14	10	9	14
Guidance counselor	6	5	5	5	4	6
Teacher	4	2	3	4	3	2
College representative recruited me	3	2	5	3	2	6
Opportunity to live away from home	6	1	6			
Low tuition	28	31	33	18	20	25
Academic reputation of the college	43	40	49	46	42	45
Offered financial assistance	18	16	22	16	13	19
Special educational program offered	35	38	42	31	32	41
I was not accepted anywhere else				2	1	3
I wanted to live at home	11	25	13	10	26	16
Someone who had been here before advised me to go	16	17	20	16	14	21
I could not get a job	9	8	12			
It will help me get a better job	57	65	70			

Table A-2

Reasons Noted by Adult Female Respondents as "Very Important"
in Selecting This College, by Marital Status, Year and Sex
(in percentages)

Reasons	Marital Status and Year					
	1975			1978		
	Not Married	Married, living with spouse	Married, not living with spouse	Not married	Married, living with spouse	Married, not living with spouse
Relative/parent	6	6	7	4	4	6
Friend	12	11	15	12	9	12
Guidance counselor	6	6	10	5	4	6
Teacher	4	3	4	4	2	4
College representative recruited me	3	2	4	3	2	4
Opportunity to live away from home	5	1	2			
Low tuition	36	39	41	22	25	24
Academic reputation of the college	51	48	52	51	45	49
Offered financial assistance	26	14	30	23	12	32
Special educational program offered	49	50	54	43	43	46
I was not accepted anywhere else				2	1	1
I wanted to live at home	19	46	25	19	48	26
Someone who had been here before advised me to go	20	20	26	17	15	21
I could not get a job	11	8	17			
It will help me get a better job	70	71	84			

Table A-3

Financial Concern of Adult Respondents, by Marital Status and Year (in percentages)

Financial Concern	1975 Not Married	1975 Married, living with spouse	1975 Married, not living with spouse	1978 Not married	1978 Married, living with spouse	1978 Married, not living with spouse
No concern	30	46	23	27	41	24
Some concern	40	36	37	42	40	41
Major concern	30	19	40	30	19	35

Table A-4

Financial Concern of Adult Respondents, by Year and Enrollment Status (in percentages)

Financial Concern	Enrollment Status and Year			
	1974		1978	
	Part-time	Full-time	Part-time	Full-time
No concern	58	35	47	28
Some concern	27	39	36	43
Major concern	15	26	17	29

Table A-5

Source of First Year's Educational Expenses for White Adult Respondents, by Institutional Type and Year (in percentages)

Source of First Year's Educational Expenses	1974 All 2-year colleges	1974 All 4-year colleges	1974 All univer-sities	1974 All black colleges	1978 All 2-year colleges	1978 All 4-year colleges	1978 All univer-sities	1978 All black colleges
Parental, family aid, or gifts	18	29	29	16	13	21	25	21
Grants and Scholarships:								
Basic Educational Opportunity Grant	13	18	15	19	19	20	19	25
Supplemental Educational Opportunity Grant	5	7	6	6	5	6	7	7
College work-study grant	5	12	9	13	4	9	9	6
State scholarship or grant	8	16	11	11	8	13	14	12
College grant (other than above)					4	12	11	12
Local or private scholarship or grant	4	12	7	7				
Other private grant					3	3	3	1
Loans:								
Federally guaranteed student loan	8	20	17	1	7	16	16	2
National direct student loan	3	12	11	8	3	8	10	2
Loan from college					2	3	4	1
Other loan	5	9	7	3	2	3	5	4
Work and Savings:								
Part-time or summer work	37	52	55	48				
Other part-time work while attending college					22	27	35	21
Full-time work while attending college					16	16	12	10
Full-time work	36	28	27	38				
Savings from summer work					13	21	28	6
Personal savings	32	47	48	41	15	18	25	7
Spouse	35	31	29	35	23	18	18	19
GI benefits from your military service	41	39	40	39	17	16	18	14
Federal benefits from parent's military service	2	2	2	0	1	1	1	6
Parent's social security benefits	2	2	2	0	1	2	1	2
Other	10	11	10	12	6	7	6	4

Table A-6

Source of First Year's Educational Expenses for Black Adult Respondents,
by Institutional Type and Year
(in percentages)

Source of First Year's Educational Expenses	Institutional Type and Year							
	1974				1978			
	All 2-year colleges	All 4-year colleges	All univer-sities	All black colleges	All 2-year colleges	All 4-year colleges	All univer-sities	All black colleges
Pl4ental, family aid, or gifts	14	21	15	20	8	11	13	20
Grants and Scholarships:								
Basic Educational Opportunity Grant	39	41	49	29	43	52	54	41
Supplemental Educational Opportunity Grant	13	17	25	14	10	17	17	12
College work-study grant	11	24	21	18	10	16	15	14
State scholarship or grant	10	22	21	8	11	19	25	8
College grant (other than above)					6	14	12	4
Local or private scholarship or grant	7	12	20	7				
Other private grant					3	5	2	3
Loans:								
Federally guaranteed student loan	12	22	24	12	7	12	12	7
National direct student loan	9	14	23	10	6	9	11	6
Loan from college					2	4	4	3
Other loan	6	10	10	6	2	2	5	2
Work and Savings:								
Part-time or summer work	24	41	35	32				
Other part-time work while attending college					15	13	15	14
Full-time work while attending college					18	14	13	19
Full-time work	45	43	33	46				
Savings from summer work					5	10	11	10
Personal savings	18	31	17	27	4	6	6	7
Spouse	19	23	14	16	9	6	5	7
GI benefits from your military service	45	40	42	46	15	8	11	16
Federal benefits from parent's military service	5	4	2	3	2	1	2	2
Parent's social security benefits	5	5	3	2	2	2	1	2
Other	12	11	12	9	6	5	6	6

Table A-7

Source of First Year's Educational Expenses for "Other" Adult Respondents, by Institutional Type and Year (in percentages)

Source of First Year's Educational Expenses	Institutional Type and Year							
	1974				1978			
	All 2-year colleges	All 4-year colleges	All universities	All black colleges	All 2-year colleges	All 4-year colleges	All universities	All black colleges
Parental, family aid, or gifts	25	40	31	59	22	29	28	45
Grants and Scholarships:								
Basic Educational Opportunity Grant	24	41	39	27	22	35	41	14
Supplemental Educational Opportunity Grant	10	16	20	20	7	12	13	4
College work-study grant	11	26	28	23	6	11	14	7
State scholarship or grant	7	22	23	14	7	16	18	7
College grant (other than above)					4	12	16	5
Local or private scholarship or grant	6	19	20	17				
Other private grant					5	6	4	5
Loans:								
Federally guaranteed student loan	8	22	21	10	6	9	9	4
National direct student loan	4	10	24	5	4	8	10	4
Loan from college					2	2	4	2
Other loan	5	12	9	5	3	3	5	2
Work and Savings:								
Part-time or summer work	35	56	57	57				
Other part-time work while attending college					20	19	28	15
Full-time work while attending college					18	9	6	12
Full-time work	46	30	20	39				
Savings from summer work					12	15	25	10
Personal savings	28	42	44	46	10	12	15	8
Spouse	27	18	28	29	14	7	12	7
GI benefits from your military service	41	28	29	10	12	14	9	6
Federal benefits from parent's military service	5	5	2	0	2	1	1	6
Parent's social security benefits	4	2	4	0	1	1	1	0
Other	14	17	14	18	6	6	6	3

Table A-8

Source of First Year's Educational Expenses of Adult Respondents, by Year and Enrollment Status
(percent responding "source")

Source of First Year's Educational Expenses	Enrollment Status and Year			
	1974		1978	
	Part-time	Full-time	Part-time	Full-time
Parental, family aid, or gifts	13	26	10	21
Basic Educational Opportunity Grant	7	26	9	30
Supplemental Educational Opportunity Grant	4	10	2	9
College Work-study grant	3	13	2	10
State scholarship or grant	3	14	2	14
College grant (other than above)			2	10
Local or private scholarship or grant	3	9		
Other private grant			2	3
Federally guaranteed student loan	5	17	3	13
National direct student loan	2	11	1	8
Loan from the college			1	3
Other loan	4	8	2	4
Part-time or summer work	19	50		
Other part-time work while attending college			12	26
Full-time work while attending college			39	8
Full-time work	61	25		
Savings from summer work			6	19
Personal savings	25	39	10	17
Spouse	34	27	23	15
GI benefits from your military service	29	45	9	17
Federal benefits from your parent's military service	2	3	1	1
Parent's Social Security benefits	2	3	1	2
Other	10	11	5	6

Table A-9

Source of First Year's Educational Expenses for Adult Respondents,
by Marital Status and Year
(in percentages)

Sources of First Year's Educational Expenses	Marital Status and Year					
	1975			1978		
	Not Married	Married, living with spouse	Married, not living with spouse	Not married	Married, living with spouse	Married, not living with spouse
Parental, family aid, or gifts	30	12	16	25	9	12
Grants and Scholarships:						
Basic Educational Opportunity Grant	27	14	42	30	14	44
Supplemental Educational Opportunity Grant	10	4	12	9	4	11
College work-study grant	12	5	13	11	4	10
State scholarship or grant	14	8	12	14	8	15
College grant (other than above)				10	6	9
Local or private scholarship or grant	8	5	6			
Other private grant				3	2	4
Loans:						
Federally guaranteed student loan	14	8	9	13	9	10
National direct student loan	10	5	10	8	4	7
Loan from college				4	2	3
Other loan	6	4	6	4	2	2
Work and Savings:						
Part-time or summer work	46	27	30			
Other part-time work while attending college				28	17	16
Full-time work while attending college				14	16	13
Full-time work	28	29	27			
Savings from summer work				23	8	6
Personal savings	40	26	20	18	13	7
Spouse	2	51	13	1	44	6
GI benefits from your military service	33	48	28	15	18	11
Federal benefits from parent's military service	2	2	2	1	1	1
Parent's social security benefits	3	1	3	2	0	2
Other	12	8	16	7	5	8

Table A-10

Source of First Year's Educational Expenses for Male Adult Respondents,
by Marital Status and Year
(in percentages)

Source of First Year's Educational Expenses	Marital Status and Year					
	1975			1978		
	Not Married	Married, living with spouse	Married, not living with spouse	Not married	Married, living with spouse	Married, not living with spouse
Parental, family aid, or gifts	33	9	20	29	8	25
Grants and Scholarships:						
Basic Educational Opportunity Grant	21	14	21	24	18	24
Supplemental Educational Opportunity Grant	8	4	8	8	5	7
College work-study grant	11	5	8	11	5	13
State scholarship or grant	12	8	6	13	9	14
College grant (other than above)				9	6	9
Local or private scholarship or grant	7	4	5			
Other private grant				3	3	7
Loans:						
Federally guaranteed student loan	13	8	8	12	9	11
National direct student loan	8	4	11	7	5	5
Loan from college				3	2	3
Other loan	6	4	7	4	2	3
Work and Savings:						
Part-time or summer work	49	26	33			
Other part-time work while attending college				29	20	14
Full-time work while attending college				14	26	17
Full-time work	26	36	33			
Savings from summer work				27	11	13
Personal savings	43	23	20	18	14	9
Spouse	1	28	7	1	24	5
GI benefits from your military service	52	74	62	26	41	32
Federal benefits from parent's military service	3	4	4	2	2	2
Parent's social security benefits	2	1	1	2	1	2
Other	9	8	11	6	7	6

Table A-11

Source of First Year's Educational Expenses for Female Adult Respondents, by Marital Status and Year (in percentages)

Sources of First Year's Educational Expenses	1975 Not Married	1975 Married, living with spouse	1975 Married, not living with spouse	1978 Not married	1978 Married, living with spouse	1978 Married, not living with spouse
Parental, family aid, or gifts	27	16	14	22	9	8
Grants and Scholarships:						
Basic Educational Opportunity Grant	35	15	52	35	13	51
Supplemental Educational Opportunity Grant	13	5	15	11	3	12
College work-study grant	15	4	15	12	3	9
State scholarship or grant	16	8	15	14	8	15
College grant (other than above)				10	5	9
Local or private scholarship or grant	9	6	7			
Other private grant				3	2	3
Loans:						
Federally guaranteed student loan	14	9	10	13	9	10
National direct student loan	12	5	10	10	4	7
Loan from college				4	2	3
Other loan	7	5	5	3	3	2
Work and Savings:						
Part-time or summer work	42	27	28			
Other part-time work while attending college				28	15	16
Full-time work while attending college				15	11	12
Full-time work	31	20	24			
Savings from summer work				19	6	4
Personal savings	36	30	20	16	13	6
Spouse	2	74	16	1	56	6
GI benefits from your military service	4	6	6	4	4	4
Federal benefits from parent's military service	1	1	0	1	0	0
Parent's social security benefits	4	1	3	2	0	2
Other	16	7	19	8	4	8

Table A-12

Source of First Year's Educational Expenses for Adult Respondents, by Father's Educational Attainment and Year (in percentages)

Source of First Year's Educational Expenses	Father's Edcational Attainment and Year											
	1975						1978					
	Grammer school or less	Some high school	High school graduate	Some college	College degree	Post-graduate degree	Grammer school or less	Some high school	High school graduate	Some college	College degree	Post-graduate degree
Parental, family aid, or gifts	15	17	21	28	41	48	13	14	17	21	29	38
Grants and Scholarships:												
Basic Educational Opportunity Grant	26	24	20	17	13	16	32	28	24	22	19	16
Supplemental Educational Opportunity Grant	11	9	7	8	6	6	9	7	8	8	6	5
College work-study grant	11	11	9	10	10	12	10	8	9	8	8	8
State scholarship or grant	11	11	12	11	10	13	12	13	12	13	10	11
College grant (other than above)							8	8	9	9	9	8
Local or private scholarship or grant	8	7	6	8	8	10						
Other private grant							4	2	3	3	3	3
Loans:												
Federally guaranteed student loan	13	14	13	15	14	17	9	11	12	13	14	12
National direct student loan	8	8	8	9	7	10	7	5	8	8	7	6
Loan from college							2	3	3	4	3	3
Other loan	7	6	7	6	6	8	3	3	3	4	3	4
Work and Savings:												
Part-time or summer work	36	40	43	48	53	56						
Other part-time work while attending college							18	22	25	28	30	27
Full-time work while attending college							15	16	17	15	12	9
Full-time work	38	36	34	35	30	28						
Savings from summer work							11	14	18	21	25	23
Personal savings	28	32	37	42	48	48	11	13	17	21	25	22
Spouse	29	30	28	29	26	28	16	18	19	18	14	13
GI benefits from your military service	43	44	43	36	33	28	15	16	18	16	14	13
Federal benefits from parent's military service	3	3	2	2	2	2	1	1	1	1	1	1
Parent's social security benefits	3	2	2	2	2	4	2	2	1	1	1	2
Other	12	10	10	10	12	12	7	7	6	6	6	5

Table A-13

Marital Status of Adult Respondents, by Probable Major and Year
(in percentages)

Probable Major	Marital Status and Year					
	1975			1978		
	Not Married	Married, living with spouse	Married, not living with spouse	Not married	Married, living with spouse	Married, not living with spouse
Agriculture	2	2	1	2	1	1
Biological sciences	5	3	3	4	2	3
Business	16	21	19	19	22	22
Education	7	9	6	7	9	8
Engineering**	6	6	4	8	5	3
English	2	2	2	2	2	1
Health professional	13	17	19	13	20	19
History and political science	4	2	2	3	1	2
Humanities	4	4	2	3	3	2
Fine arts**	7	4	4	8	4	4
Mathematics and statistics	1	0	1	1	0	0
Physical sciences	2	2	1	2	1	1
Preprofessional*				2	2	1
Social science	11	8	14	9	9	13
Other fields (technical)**	9	10	10	8	8	12
Other fields (nontechnical)**	9	9	8	8	7	7
Undecided	3	2	2	2	2	2

*The whole category of preprofessional major was not available in 1975.

**In 1978, the category of fine arts included architecture and the category of other fields (technical) included other professional. In 1975, fine arts was included in the engineering category and other professional was included in other fields (nontechnical). These four majors are therefore, not directly comparable across the two years.

Appendix B

In an attempt to gain more insight into the collegiate experiences of adult and traditional-aged students, a subsample of respondents to the HERI-administered 1977 follow-up of the 1970 freshman cohort was analyzed. The various follow-up surveys issued by HERI (with the support of a number of different funding agencies) include post-tests of freshman survey items and items specific to the interests of the sponsoring group(s).*

Out of the 28,599 questionnaires that were sent to the 180,000 CIRP respondents of 1970, a sample of 9,039 students were drawn for the current analysis. Of the 9,039 respondents on which this analysis was based, only 134 or 1.5 percent of the respondents were classified as adults when they were college freshmen in 1970. Since the sample of adults available for analysis is quite small and the respndents were randomly selected and were not necessarily representative of all those that responded to the 1970 survey, the results cannot be generalized to all adults in postsecondary education.

In addition to providing preliminary longitudinal analysis of this subgroup of adults, the 1977 follow-up data allows us to examine career outcomes information. The information yielded from such an analysis also has special value in showing the possibilities of building upon current work by resurveying cohorts or adults who attended college and respondended to the CIRP survey when they were freshmen.

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The Decision to Enter College

According to the follow-up data, the primary reason that freshmen have for attending college is to get a better job (Table B-1). At least 70 percent of both those who were of traditional age and those who were over 21 at the time they entered college cited this reason as very important. Getting a better job was much less likely to be a consideration for single students than for married ones; the exception was older single women, who were more likely to cite this reason than were older married women. It would seem, then, that institutions wishing to attract either more traditional students or more adult students should lessen their emphasis on students' personal, intellectual, and social development in favor of a more career-centered orientation.

The next most common reasons given for attending college--cited by about half or more of both groups-- were to learn more about their interests, to gain a general education, to make more money, and to improve their academic abilities. Learning about topics of interest and gaining a general education and appreciation of ideas were more important to women than to men and to the older respondents, especially if they were single, than to the younger. The women who responded to the follow-up survey were more interested in improving their academic abilities than the men were, especially if they were older and married. Married women cited this reason more often than did single women, and single men gave this reason more frequently than did married men. The men surveyed were more concerned than were the women with making more money. Making more money was given as a reason for entering college more frequently by older respondents and those

Table B-1

Very Important Factors in Decision to Attend College, by Age
(in percentages)

Very Important Factors in Decision to Attend College	Age	
	Under 22 Years of Age	Over 22 Years of Age
To prepare for graduate or professional school	16	19
To improve academic abilities	54	52
To contribute more to my community	17	21
To get a better job	75	70
To make more money	55	57
To gain a general education and appreciation of ideas	61	63
To learn more about things that interest me	70	70
To meet new and interesting people	40	18
To get involved in extracurricular college activities	11	4
To be with friends	10	2
To find a spouse	2	1
To avoid the draft	5	0
Parental or family encouragement	33	10
Nothing better to do	5	2
Always expected to go	42	14
N	8,824	729

who were married but 62 percent of the older single women, cited this reason as compared with 52 percent of the older married women. Only around 20 percent of both the older and younger respondents said that preparing for graduate or professional school was a very important reason in their decision to attend college.

"Although it was important to many freshmen to go to college for general academic reasons, it was at least as important, if not more so, to attend in order to improve their chances in the job market." (Ochsner, 1979, p.12). Very few of those who were adults as freshmen, as compared with those who were of a traditional college age, decided to attend college because they wanted to be with friends, because they wanted to get involved in extracurricular activities, because of parental or family encouragement, or because they were always expected to go. More than twice as many of the younger respondents than older ones said that the prospect of meeting new and interesting people played a significant part in their decision making. This reason was especially important to the younger women and to all other single respondents.

Tuition is another factor likely to affect the decision to attend college. Those who were adults when they were college freshmen in 1970 attended less expensive colleges than did their younger counterparts (Table B-2). The majority of the older respondents (57 percent), as compared with only 25 percent of the younger, spent $500 or less in 1970 on tuition. The majority of those who were younger as freshmen (44 percent) spent from $500 to $1000 on college tuition, while only 24 percent of the older respondents reported having spent this much.

Table B-2

Tuition of 1970 Freshman College, by Age
(in percentages)

Tuition of 1970 Freshman College		Age	
		Under 22 Years of Age	Over 22 Years of Age
$250 or less		8	27
$250 to $499		17	30
$500 to $999		44	24
$1,000 to $1,499		6	8
$1,500 to $1,999		8	8
$2,000 to $2,499		9	3
$2,500 to $2,999		7	1
$3,000 to $3,499		2	0
$3,500 or more		0	0
	N	8,905	134

Adult students may make more money (i.e., from full-time work) than do those of traditional college age, but perhaps they are able to allocate less of their earnings to pursue a college education. Many adult students, therefore, attend two-year colleges, which have lower tuitions but which are relatively unselective and, according to some people, lower in quality than four-year colleges and universities. Costs then are a real concern to adult students, and four-year institutions will have either to lower tuitions, provide more financial aid or package the financial aid that is available in more attractive ways if an adult clientele is to make up for the declining number of college-bound 18-to-21-year-olds and if the college experiences of adult students are to be of high quality.

Academic Attainments

The majority of college freshmen followed up in the 1977 survey reported anywhere from a B to a C+ grade point average for their undergraduate years, with older respondents more likely to fall into this category. A substantial proportion of the traditional-aged freshman population (36 percent) reported A, A-, or B+ grade point averages.

Even though in the preceding chapters it was pointed out that adult students seem to come to college feeling less prepared than their traditional-aged counterparts, it can be seen from the discussion above that this perceived lack of preparation did not seem to hamper their ability to perform just about as well in their college courses as those who were younger and supposedly better prepared. Perhaps, then, the notion that adults lack self-confidence in facing a new and somewhat threatening environment, inhabited primarily by younger people has some validity. If it is true that lack of self-confidence is the problem, an initial freshman orientation for adult students to reassure them of their capabilities and to ease their fears in coming to a new and youthful environment may be a wise investment of time and money.

The younger student's initial degree aspirations seemed to be higher than those of their adult counterparts (Table B-3). More of the adults than traditional-aged students who pursued an associate of arts degree or its equivalent in 1970, actually attained this goal by 1977 (67 percent of the traditional-aged students versus 43 percent of the adult students). Clearly, younger students with this initial aim went on for at least a bachelor's degree. Younger students aspiring to a bachelor's or advanced degree were more likely to have obtained such a degree, where a slightly higher proportion of adults who planned on receiving this degree actually did so (17 percent of the older students versus 14 percent of the younger students). Therefore, more of the adult students were "underachievers" (48 percent) as compared to their younger counterparts (39 percent) as far as meeting their initial goals was concerned. A larger percentage of the younger students actually attained their original goals but about equal numbers of both groups of students were "overachievers" in that they attained degrees higher than what they originally sought (eight percent of both adults and traditional-aged students).

Table B-3

Highest Degree Planned When Entered College, by Highest Degree Held in 1977 and Age (in percentages)

Highest Degree Planned When Entered College	Highest Degree Held in 1977 and Age											
	None	AA	BA	MA	PhD	Other	None	AA	BA	MA	PhD	Other
None	31.4	9.3	43.0	10.5	1.2	4.7	-	-	-	-	-	-
Associate or equivalent	21.4	42.8	31.6	0.6	0	3.6	0	66.7	20.0	0	0	13.3
Bachelor's	11.2	5.8	74.3	6.7	0.5	1.6	22.2	20.6	55.6	0	0	1.6
Master's	8.1	3.9	71.2	14.5	1.1	1.1	0	16.7	61.1	16.7	0	5.6
Doctorate equivalent advanced, professional (PhD, MD, DDS, DVM, LLB)	7.9	3.0	64.3	19.9	3.8	1.1	8.3	8.3	58.3	25.0	0	0
Other	18.8	6.3	62.5	6.3	0	6.3	-	-	-	-	-	-

One reason for the lower attainment of adult students is that older students merely had not completed the course of study required to obtain the degree they intended by 1977 since they were attending part-time. Another reason is that the degree aspirations of the adults in the follow-up sample could have really been lower than those of younger students because many of them were motivated to attend college merely for vocational reasons, i.e., to advance in their careers or to make midlife job changes. Therefore, they may have sought no more than the minimum college education needed to reach these goals. Though traditional-aged freshmen may have been too young and too unsettled to know exactly what they were seeking, they did know that the baccalaureate was the least that was needed for a desirable entry-level position in the labor force. They were not committed to, nor did they have any objections to, getting a higher degree. Career counselors could be of help to younger freshmen by providing accurate information on the degree requirements for various jobs.

Selection of an Undergraduate Major

"The reasons students go to college may not be as important to college academic and career counselors as the reasons they choose their particular major fields. Certainly college counselors cannot have much impact on how or why freshmen have already decided whether or not to go to college and which colleges they wish to attend. That is the responsibility of high school counselors, and to some extent, college recruiters. College counselors can, however, influence students' selection of major fields or at least their selection of curricular paths." (Ochsner, 1979, p.12)

Whatever their ages when they matriculated in 1970, seven years later respondents were most likely to say that a very important factor in their selection of an undergraduate major was that it would give them a better chance to get a meaningful job (Table B-4). Those who were 22 or older as freshmen were more likely, however, to cite this reason than were younger students. Intellectually challenging subject matter and a special aptitude for the subject were also relatively important considerations, especially for those of traditional college age in 1970.

In summary, students seem to choose their undergraduate majors for the same reasons they attend college in the first place. The prime motivating forces were a desire for intellectual development and concerns about the job market. Only about 10 percent of the respondents had been influenced in their choice of major by the possibility of bettering their chances of admission to graduate or professional school.

College Counseling

Those who were adults when they entered college in 1970 were slightly more receptive than were their younger counterparts to the various types of college counseling (academic, career, and personal) offered (Table B-5). This was particularly true of personal counseling. Although not shown here, the data showed that personal counseling was especially popular among single adult men and married adult women. Probably, personal counseling was helpful to adult students in coping with the fear associated with adjusting to a new and predominantly youth-oriented environment. Also, older students may have been more aware of the value of being able to take advantage of a free service

Table B-4

Very Important Factors in Selecting Undergraduate Major as Reported in 1977, by Age (in percentages)

Very Important Factors in Selecting Undergraduate Major	Age Under 22 Years of Age	Age Over 22 Years of Age
Greater breadth than other disciplines	22	16
Better chance to get higher paying job	23	40
Better chance to get meaningful job	53	64
Intellectually challenging subject matter	50	43
Peer group influence	4	4
Special aptitude for subject	52	36
Faculty advice, encouragement	12	11
Family advice, encouragement	13	14
Encouragement by person in field	14	15
Better chance of admission to graduate or professional school	9	12
No better alternative	9	5
Easy subject	3	1
Quickest way to graduate	3	3
N	8,627	124

Table B-5

Types of College Counseling Received, by Age
(in percentages)

Types of College Counseling Received		Age	
		Under 22 Years of Age	Over 22 Years of Age
Academic or course counseling		86	87
Career counseling		68	73
Personal counseling		52	62
	N	8,905	134

where they would be able to remain fairly anonymous, (since they would be surrounded mostly by younger students). For both age groups, academic counseling was utilized most, career counseling next, and finally personal counseling--perhaps because the last type generally has the most stigma attached to it.

All of the respondents were generally satisfied with different types of college counseling they received, except that younger respondents tended not to be satisfied with the career counseling available to them (Table B-6). Only about 15 percent of the younger respondents and around a quarter of the older respondents who received college counseling indicated that they were very satisfied with it. Clearly, the quality of college counseling services needs to be improved. Moreover, many students (especially those that were of a traditional college age) never seek counseling services, and an overwhelming majority of those who have participated in career counseling have come away dissatisfied.

Satisfaction With College Experiences

Almost three-fourths of those respondents who were of a traditional college age in 1970, but only 61 percent of the older group, stayed in their original colleges during their entire undergraduate careers (Table B-7). Adult students, especially those that were married, were also more likely to graduate from the colleges they entered in 1970 as freshmen. Adult stu-

Table B-6

Satisfaction with Types of College Counseling Received, by Age
(in percentages)

Satisfaction with Types of College Counseling Received	Age and Types of College Counseling					
	Academic or Course Counseling		Career Counseling		Personal Counseling	
	Under 22 Years of Age	Over 22 Years of Age	Under 22 Years of Age	Over 22 Years of Age	Under 22 Years of Age	Over 22 Year of Age
Not satisfied	42	30	56	43	39	42
Somewhat satisfied	45	42	35	36	45	30
Very satisfied	13	28	9	22	16	28
N	7,554	112	5,978	93	4,519	81

Table B-7

Whether or Not 1970 College Was the Same As the Last College Attended, by Age (in percentages)

Whether or Not 1970 College Was the Same As the Last College Attended		Age	
		Under 22 Years of Age	Over 22 Years of Age
No		27	39
Yes		73	61
	N	8,795	130

Table B-8

Satisfaction with Colleges Attended, by Age
(in percentages)

Satisfaction with Colleges Attended		Age			
		Under 22 Years of Age		Over 22 Years of Age	
		College Entered in 1970	Last College Attended	College Entered in 1970	Last College Attended
Not satisfied		12	8	8	2
Somewhat satisfied		36	41	33	40
Very satisfied		52	51	59	58
	N	8,740	2,373	129	50

Table B-9

Usefulness of a College Education, by Age
(in percentages)

Usefulness of a College Education	Age	
	Under 22 Years of Age	Over 22 Years of Age
Learned a skill that enabled me to get my first job	39	30
Increased my chances of finding a good job	50	58
Helped me choose my life goals	34	36
Gave me knowledge and skills that I use in my current job	44	50
Bachelor's degree a factor in being hired by current employer	45	38
Bachelor's degree necessary for promotion	32	29
Contacts with professors or friends helped me get my current job	14	13
Increased general knowledge	68	72
Increased ability to think clearly	51	51
Increased leadership ability	32	34
Increased critical thinking or analytical skills	54	50
Improved self-discipline and ability to follow rules	34	35
Improved self-confidence	44	43
Increased perseverance	36	35
Increased creativity	30	34
Improved writing ability	32	39
Increased insight	46	46
Increased cultural perspective	44	40
Taught me how to get along better with people	36	28
Increased political awareness	24	28
Increased desire to travel	32	21
N	8,849	126

dents, however, were more likely to have reported that they attended at least two colleges (48 percent of the older respondents vs. 38 percent of the younger respondents). This does not necessarily mean, however, that older respondents were less satisfied with their college experiences. In fact, while the majority of the respondents were very satisfied with the colleges they attended, adults tended to be more satisfied than their younger counterparts (around 60 percent of the older respondents said they were "very satisfied" as compared with around 50 percent of the younger respondents) (Table B-8).

The population of older students who attended more than one college was probably made up of adults who began their college careers at two-year colleges and then transferred to four-year institutions, while most traditional-aged college freshmen selected four-year colleges and universities to begin with.

If they are to attract new adults to their programs, four-year colleges and universities must be aware of the efforts of their competitors in bringing education to older Americans. Two-year colleges already seem to be appealing to the strongly vocational orientation of adult students.

When questioned about the usefulness of a college education, the majority of both groups said the most important benefit was that it increased their general knowledge (Table B-9). This was true regardless of sex or marital status.

Younger respondents of both sexes and older women were more likely than were older men to point out that, from their college educations they learned a skill that enabled them to get their first jobs and that having a baccalaureate was a factor in their being hired by their current employers. More of the older respondents, especially the married women, said that a college education was beneficial in that it increased their chances of finding a good job. Again, intellectual and job connected benefits are the prime considerations.

Younger respondents, especially single men, were much more likely to say that their college education increased their desire to travel and taught them how to get along better with people. Older respondents were probably specifically concerned with the effects of a college education on their job opportunities and their career advancement while younger respondents were also interested in becoming well-rounded people. For example, 34 percent of those who were of adult status when freshmen in college agreed that the chief benefit of a college education was that it increases one's earning power, as compared with only 39 percent of those who were freshmen when they were of a traditional college age (Table B-10). By 1977, however, many of the younger respondents had become somewhat more convinced that this statement was correct (Table B-11).

If they had it to do over again, only around a quarter of the sample said they would very likely attend different institutions (Table B-12). Overall, around 30 percent said there was a very good chance that they would change their major fields. The greatest proportion of the younger respondents (47 percent) said that, with their present knowledge and experience, if they were considering college today, the major change they would make is to take more courses in a different subject area. Only 36 percent of the older respondents said that there is a very good chance that they would make this change. More than a third of both age groups said they

Table B-10

Attitudes Toward the Statement, "The Chief Benefit of a College Education is That it Increases One's Earning Power", by Age (in percentages)

"The Chief Benefit of a College Education is That it Increases One's Earning Power"		Age	
		Under 22 Years of Age	Over 22 Years of Age
Disagree strongly		25	19
Disagree somewhat		35	28
Agree somewhat		33	42
Agree strongly		6	12
	N	8,750	131

Table B-11

Change in Attitude from 1970 to 1977 Toward the Statement "The Chief Benefit of a College Education is That it Increases One's Earning Power", by Age
(in percentages)

"The Chief Benefit of a College Education is that it Increases One's Earning Power" 1970	1977							
	Under Age 22				Age 22 or older			
	Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly	Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly
Disagree strongly	29	13	7	6	28	6	2	0
Disagree somewhat	29	27	20	17	12	19	11	7
Agree somewhat	34	46	52	47	40	58	66	60
Agree strongly	9	13	21	30	20	17	22	33
N	2,218	3,054	2,914	564	25	36	55	15

Table B-12

Changes Would Make if Considering College Today (with Present Experience and Knowledge), by Age
(in percentages)

Changes Would Make if Considering College Today (With Present Experience and Knowledge)	Age	
	Under 22 Years of Age	Over 22 Years of Age
Change specialization within field	30	22
Change major field	33	30
Change some social experience	31	22
Change institution	25	28
Change or broaden range of career goals aspired to	40	38
Not attend college	4	35
Take more courses in another area	47	36
Plan to go to graduate school in undergraduate field	24	27
Work for an advanced or professional degree in another field	24	24
Do it all the same way	16	22
N	8,430	124

would change or broaden the range of their career goals. It seems as if the changes that both age groups said they would make involved a realistic assessment of the current employment situation in that perhaps in 1977, when many of these students were in the labor force, they realized either that they had chosen the wrong major to fulfill their career aspirations or that by concentrating on just one academic area or one career goal, they had limited themselves as far as other career options were concerned.

Younger respondents were more likely than were older respondents to say that if they were considering college with their present knowledge and experience, they would change some social experience. The explanation for this difference may be that, because traditional-aged students are generally more involved in the social life of the college than are adult students, they are also more likely to regret not having taken advantage of the social opportunities or experiences offered to them.

Very few of the respondents (5 percent) said they would not attend college at all. A larger proportion of older (22 percent) than of younger (16 percent) respondents said that the chances were excellent that they would do it all the same way again.

Employment While in College

Most students, regardless of their age as freshmen, worked part time for certain periods while they were in college (Table B-13). Part-time employment was generally more characteristic of those of traditional college age and those who were single adults when freshmen. On the other hand, full-time employment during the entire undergraduate career was much more likely

Table B-13

Employment While in College, by Age
(in percentages)

Employment While in College	Age	
	Under 22 Years of Age	Over 22 Years of Age
Held one job on campus as an undergraduate	24	13
Held more than one job on campus as an undergraduate	16	3
Held one job off campus as an undergraduate	28	31
Held more than one job off campus as an undergraduate	24	20
Worked full-time all the time attended college	2	23
For certain periods while in college - worked full-time	28	26
Worked part-time all the time attended college	19	15
For certain periods while in college - worked part-time	49	31
N	8,905	134

to be typical of adults (23 percent) than of traditional-aged college students (2 percent). Probably as a reflection of their generally greater involvement in college life, younger respondents were much more likely to have held at least one job on campus (40 percent of the younger respondents vs. 16 percent of the older respondents).

Greater flexibility in the timing and scheduling of classes is needed to accommodate a group of students that work at least part-time while attending college. This adjustment on the part of colleges and universities is especially critical for those adults who, for example, are employed full-time and have family-related responsibilities but who still want a college education.

Choosing a Career

A college career counselor usually has the most contact with students during the senior year, when they become seriously concerned with career planning. But by that time, it is generally too late, because at least three-fourths of both the older and younger respondents alleged that they had already chosen their careers (Table B-14). In fact, 50 percent of those who were adults when college freshmen and 34 percent of those who were of traditional-age, said they had chosen their careers before they even entered college. The former group probably made their career decisions early because they were older, likely to be already employed in full-time jobs, and thus had come to college merely to learn the skills required for job advancement or career change. Only 25 percent of the younger respondents, but 38 percent of the older respondents, thought that, ideally, the career decision

Table B-14

When Made Career Choice, by Age
(in percentages)

When Made Career Choice		Age	
		Under 22 Years of Age	Over 22 Years of Age
Before entering college		34	50
Upon entering college		7	8
At the time major must be selected		9	8
During college, before senior year		22	18
During senior year		6	2
At graduation		1	1
Within two years after graduation		11	7
Longer than two years after graduation		4	6
At present time (within last few months)		5	1
	N	8,486	120

should be made before entering college. The probable reason that more of the older respondents felt this way is that they had had time to experiment with different jobs and thus to decide on their careers before entering college. Many of the adult students who had made career decisions early in their undergraduate years have since come to feel that a student's career choice should not be made too early. Nonetheless, at least 80 percent of both groups advocated choosing a career before the senior year. Career counselors should, therefore, be available to students before the senior year, and greater efforts should be made to assure that students make fuller use of career counseling services.

Successful Job Search Methods

For those respondents who were employed full time in 1970, the most successful method used in getting their current job was direct personal application to the employer (Table B-15). The college placement office, professional contacts, contacts through a previous job, parents/relatives, friends, and luck or chance were more successfully used by younger respondents, while civil service application was a more effective method for older respondents.

Only 11 percent of the younger respondents and 6 percent of the older respondents successfully used the college placement office to get their current or most recent jobs. This difference suggests either that adult students are not as prone as their younger counterparts to take advantage of the services offered by their colleges or that the college placement office is not geared toward meeting the needs of an adult clientele.

Table B-15

Job Search Methods That Worked in Getting Current or Most Recent Job, by Age and Full-time Employment Status (in percentages)

Job Search Methods That Worked in Getting Current or Most Recent Job	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
College placement office	11	5
College professors	5	5
Public/state employment service	4	7
Civil service application	5	18
Private employment agency	6	6
Recruiting teams from government, industry	3	1
Professional contacts	13	7
Direct personal application to employer	48	52
Professional organizations, meetings	1	1
Newspaper advertisements	8	11
Professional journals, periodicals	1	1
T.V., radio	0	0
Other advertising	1	1
Community action/welfare groups	0	1
Registration with a union	0	0
Met new employer through previous job	6	1
Unsolicited offer	5	1
Parents/other relatives	10	5
Friends	17	12
Luck/chance	17	12
N	5,680	85

Current Occupation

Of those who were adults when they entered college in 1970, 42 percent were employed full time in an occupation which fell into the unspecified "other" category (Table B-16). Research scientist was the most frequently mentioned full-time occupation for those who were of traditional age when college freshmen (35 percent). Businessman was the second most common occupation among both groups. A relatively large proportion of the older group (8 percent with 3 percent of the younger) were nurses.

Relation of Job to Major

At least 50 percent of both groups of respondents who were employed full time when the follow-up was conducted were working in jobs closely related to their major fields (Table B-17). Those who were working at full-time jobs only somewhat or not at all related to their undergraduate majors most commonly gave involuntary reasons: forty-two percent of the younger respondents and 26 percent of the older respondents indicated that employment opportunities were scarce for people in jobs related to their majors, a reason which takes much of the responsibility out of the individual's hands (Table B-18). Most of the reasons specified on the follow-up questionnaire were more likely to be given by younger respondents: i.e. "never planned to take a closely related job," "prefer work not closely related," "found job that offers a better chance of career advancement," "related jobs not available where I live and do not want to move," and "could not get a closely related job, but would prefer one." On the other hand, older respondents were likely to say that they were working on a job that was unrelated or only somewhat related to their undergraduate major because

Table B-16

Current Occupation, by Age and Full-time Employment Status
(in percentages)

Current Occupation	Age and Full-time Employment Status: Under 22 Years of Age	Age and Full-time Employment Status: Over 22 Years of Age
Artist (including performer)	4	0
Businessman	22	24
Clergyman	0	0
College teacher	1	1
Doctor (M.D. or D.D.S.)	0	0
Education (secondary)	8	6
Elementary teacher	11	11
Engineer	6	5
Farmer or forester	2	1
Health professional	5	3
Lawyer	1	0
Nurse	3	8
Research Scientist	35	0
Other choice	0	42
Undecided	3	0
N	6,109	101

Table B-17

Relation of Current or Most Recent Job to Undergraduate Major, by Age and Full-time Employment Status (in percentages)

Relation of Current or Most Recent Job to Undergraduate Major		Age and Full-time Employment Status	
		Under 22 Years of Age	Over 22 Years of Age
Not related		30	29
Somewhat related		20	19
Closely related		51	52
	N	6,284	101

Table B-18

Reasons Working in a Job Only Somewhat or Not Related to Undergraduate Major, by Age and Full-time Employment Status (in percentages)

Reasons Working in Job Only Somewhat or Not Related to Undergraduate Major	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
Never planned to take a closely related job	14	8
Prefer work not closely related	10	4
Tried closely related employment, but did not like it	8	6
First job was unrelated to major and became interested in this work	24	19
Joined family business or firm	6	2
Found a better paying job	16	21
Found a job that offers a better chance of career advancement	22	15
Promoted out of closely related job	2	2
Wanted part-time work, flexible hours	2	2
Wanted to work at home	2	4
On temporary assignment (political appointment, Vista, Peace Corps, USIA, etc.)	1	0
Related jobs not available where I live and do not want to move	15	9
In the military	4	2
Could not get a closely related job, but would prefer one	32	19
Limited in job selection by situation of spouse, family responsibilities	10	21
Employment opportunities are scarce for people in related jobs	42	26
N	3,179	53

they had found a better-paying job or because they were limited in job selection by the situation of their spouses and by family responsibilities: these reasons show their concern for the family responsibilities they were resolved to meet.

The Contribution of Various Experiences to Job

The experiences or training which contributed a great deal to the current or most recent jobs of the respondents were general on-the-job experience, particular course(s) in major field, and college study in general (Table B-19). Younger respondents were somewhat more likely to mention these experiences than older respondents.

The older respondents were more likely to feel that formal training or courses other than their college program and programs offered by their employers contributed significantly to their current jobs, while their younger counterparts felt that a formal training program at their place of employment was an important contribution to their current jobs.

Job Characteristics

Various characteristics of jobs influence satisfaction and dissatisfaction. Among these are utilization of skills, status or prestige, salary, degree of responsibility, job level, and autonomy.

Since the older respondents had been in the labor force longer, one would expect them to hold higher-status positions and to have more work responsibility than their younger counterparts. Surprisingly, more of younger than older respondents said they were working at a professional level and that they had policy and decision-making responsibility (Table B-20).

Table B-19

Extent of Contribution of Various Experiences to Current or Most Recent Job, by Age and Full-time Employment Status (in percentages)

Extent of Contribution of Various Experiences to Current or Most Recent Job	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
Particular course(s) in major field	40	39
Other particular courses	21	21
College study in general	35	25
Work experience while in college	24	20
Extracurricular activities while in college	9	8
Formal training program at place of employment	29	23
Formal training or course other than your college program or programs offered by employer	16	25
General on-the-job experience	68	61
Leisure-time activities	9	5
N	3,861	70

Table B-20

Job Characteristics, by Age and Full-time Employment Status (in percentages)

Job Characteristics	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
Well paid for work compared with persons at the same job level in same place of employment	35	40
Well paid for work compared with persons at the same job level in other work settings	35	31
Well paid for work compared with people in general with the same amount of education	34	37
Supervise people trained in my field	14	23
Most colleagues trained in my field	40	33
Most of the time, set own hours	16	12
Most of the time, design own work program	41	36
Have policy and decision-making responsibility	45	35
Have sufficient status or prestige in job	47	50
Satisfied with career progress to date	56	60
Current job offers good future prospects for further advancement	46	50
Job fits long-range goals .	39	39
Skills are fully utilized in job	31	37
Working at a professional level	60	55
Satisfied with the quality of interaction with supervisor	53	50
Would like to remain with current employer for the forseeable future	46	54
During college had a part-time or summer job related to current job	32	24
Self-employed	4	3
Would have liked more college training before started working	14	14
Would have liked more training outside of college before started working	13	3
Received job training inappropriate for actual job requirements	10	8
Glad had college education	77	78
N	6,242	105

This implies that entry-level workers interpret the meaning of the term "professional level" differently than do the experienced workers. About half of all the respondents felt they had sufficient status or prestige in their jobs.

Although few graduates in either age group had the flexibility to set their own hours, a significant percent designed their own work programs. In both cases, more younger than older respondents indicated that this was so. The older respondents were almost twice as likely as the younger to supervise people trained in their fields.

Only about a third of the respondents felt well paid compared with others, but older respondents were more likely to feel well paid as compared with persons at their same job level and same place of employment.

Thirty-seven percent of the older workers felt their skills were being fully utilized on the job as compared with 31 percent of their younger counterparts. Experience in the labor force probably accounts for this difference. Utilization of skills has been identified as a very important component of overall job satisfaction, but attention must be paid to other job characteristics as well.

Nearly half of all of the respondents appeared to be satisfied with their current jobs because they said they would like to stay with their current employers. Slightly more of the older respondents felt this way.

More of the younger respondents would have liked more training outside of college before they started working. This is understandable in that these people have had less time to get training outside of college than have their older counterparts.

Current Annual Income

The median income of older respondents was slightly higher ($12,380) than that of younger ($10,500) (Table B-21). This finding is not surprising because the former had been in the labor force longer and had more experience. What is surprising is that the difference was not greater.

Attitudes Toward Work

Another measure of job satisfaction is the individual's attitude toward his or her job. Respondents in both age groups were asked to indicate their feelings regarding a series of attitudinal statements.

Among those who were employed full time in 1977, the two groups differed little in their attitudes toward work (Table B-22). The statements with which respondents were most likely to indicate strong agreement were: "I have the skills necessary to perform my work activities optimally," "if I had not attended college, I would have been able to perform my current (or most recent) job as well," and "if I get the promotions I expect and can expand my responsibilities as I become more experienced, I would be satisfied to remain in my type of work for the forseeable future." These attitudes are slightly more characteristic of the younger respondents than of the older ones, probably because relatively new entrants to the labor force often exude self-confidence and are generally more future-oriented. The older respondents were more likely to feel that their jobs did not leave them enough time for outside leisure activities and for their family and friends and that prospects were good that they would reenter college or seek occupational retraining some time after they were 30 years old.

Table B-21

Current Annual Income Before Taxes, by Age and Full-time Employment Status
(in percentages)

Current Annual Income Before Taxes	Age and Full-time Employment Status: Under 22 Years of Age	Age and Full-time Employment Status: Over 22 Years of Age
None	0	0
Below $7,000	12	9
$7,000 - $9,999	32	25
$10,000 - $11,999	23	19
$12,000 - $13,999	14	18
$14,000 - $16,999	12	18
$17,000 - $19,999	5	7
$20,000 - $24,999	1	1
$25,000 - $29,999	0	2
$30,000 - $34,999	0	2
$35,000 - $39,999	0	0
$40,000 and over	0	0
N	6,268	105
Median income	$10,500	$12,380

Table B-22

Attitudes Toward Work, by Age and Full-Time Employment Status (in percentages)

Attitudes Toward Work	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
My job does not leave me enough time for my family, friends	19	22
My job does not leave me enough time for outside, leisure activities	26	28
If I could find a job with less time demand, I would take it if I didn't have to suffer too great a salary cut	22	19
People with less education are performing the the same job I currently (or most recently) performed	41	41
If hired, people with less education would be able to perform the same job I currently (or most recently) performed	40	40
I have the skills necessary to perform my work activities optimally	63	58
If I had not attended college, I would not have been able to perform my current (or most recent) job as well	60	55
If I had not attended college, I would have been able to perform my current (or most recent) job as well	30	30
If I had not attended college, I would have been able to perform my current (or most recent) job better	3	0
Prospects are good that I will re-enter college or seek occupational training sometime after I am 30 years old	31	38
If I get the promotions I expect and can expand my responsibilities, I would be satisfied to remain in my type of work for the forseeable future	54	48
N	6,325	104

Job Satisfaction

Although at least 50 percent of the respondents in both groups said they were not underemployed (Table B-23) and almost as many said they were very satisfied with their current jobs (Table B-24), only about 40 percent said they were in their preferred occupations (Table B-25).

Older respondents were more satisfied with their jobs than their younger counterparts, and the mean length of employment at their current jobs was three years, 5 months; younger respondents had been with their jobs for an average of 2 years, 1 month. This difference may simply indicate that older respondents had already formed their career aspirations at the time they entered college. Most either perfected or modified what they already had.

A substantial proportion of both groups were very satisfied with working conditions (hours and location) and with job security (Table B-26). On other points, the groups differed. Thus, more older than younger respondents were very satisfied with the challenge their jobs offered, the opportunity for creativity that was available to them, their opportunity to use their training or schooling in their jobs, and their opportunity to contribute to society through their jobs. Most of these advantages accompany being in a job for a reasonable length of time.

Those who were of traditional college age when freshmen were more likely to be very satisfied with their visibility for jobs at other institutions or organizations. Both groups of respondents were about equally satisfied with the other job aspects listed.

Table B-23

Perceptions of Underemployment, by Age and Full-Time Employment Status (in percentages)

Perceptions of Underemployment	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
Not underemployed	54	56
Underemployed; but for personal reasons prefer to remain in this or a similar position	13	14
Underemployed; would prefer more challenging position	33	30
N	6,210	102

Table B-24

Satisfaction with Current or Most Recent Job,
by Age and Full-Time Employment Status
(in percentages)

Satisfaction with Current or Most Recent Job		Age and Full-time Employment Status	
		Under 22 Years of Age	Over 22 Years of Age
Not satisfied		15	15
Somewhat satisfied		43	36
Very satisfied		42	49
	N	6,286	105

Table B-25

Whether or Not Working in a Preferred Occupation, by Age and Full-Time Employment Status
(in percentages)

Whether or Not Working in a Preferred Occupation		Age and Full-time Employment Status	
		Under 22 Years of Age	Over 22 Years of Age
No		59	56
Yes		41	44
	N	6,216	103

Table B-26

Degree of Satisfaction with Various Aspects of Current or Most Recent Job, by Age and Full-Time Employment Status (percentages responding "very satisfied")

Various Aspects of Current of Most Recent Job	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
Income	26	25
Fringe benefits	43	42
Working conditions (hours, location)	50	57
Status of position	39	43
Status of employing institution/organization	45	43
Autonomy, independence	42	46
Variety in activities	40	41
Policy-making power	18	21
Congenial work relationships	51	49
Competency of colleagues	39	37
Opportunities for different (better) jobs at this institution/organization	24	27
Visability for jobs at other institutions/organizations	25	21
Challenge	43	48
Extent of responsibility	43	41
Job security	53	52
Opportunity for leisure time	36	37
Opportunity for creativity	30	35
Opportunity to use training or schooling	38	43
Opportunity to contribute to society	35	47
N	6,272	104

Career Plans

Only 14 percent of the younger respondents and 11 percent of the older ones said they had no career plans when they left college (Table B-27). Most of the older respondents said their career plans were exactly the same now as when they left college; the majority of younger respondents had changed their career choice at least once while in college.

"For many students, regardless of their ages--choosing a career is not a one-shot operation, rather it is a continuing process of adjustment that extends well beyond the educational years" (Ochsner, 1979, p.15). The career-counseling role in college, therefore, is not a one-time deal; rather, encouragement of alternative career consideration is constantly needed. Around a third of the sample said their career plans were somewhat the same now as when they graduated, while one quarter said their plans were not at all the same.

Even though the majority of all the respondents did not change their career plans, more of the younger than the older had changed their plans (Table B-28). The younger respondents were more likely to say that they had changed career plans after leaving college because they did not know enough about career alternatives when they left college, because jobs in their original career choice were scarce, because they were no longer interested in the same career, or because they decided to go to graduate school. The older respondents were more likely to say that a change in their financial circumstances or in their family responsibilities made a career change necessary.

Table B-27

Career Plans, by Age and Full-Time Employment Status
(in percentages)

Career Plans	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
Had no career plans when left college	14	11
Career plans are exactly the same now as when left college	30	49
Changed career choice at least once while in college	40	19
Career plans are somewhat the same now as when left college	39	31
Career plans are not the same as when left college	27	23
N	6,294	100

Table B-28

Change in Career Plans, by Age and Full-Time Employment Status
(in percentages)

Change in Career Plans	Age and Full-time Employment Status	
	Under 22 Years of Age	Over 22 Years of Age
Did not change career plans	37	58
No longer interested in the same career	20	13
Financial circumstances have changed	18	25
Family responsibilities have changed	15	23
More interested in trying to change society	8	6
Less interested in trying to change society	6	4
Decided to go to graduate school	17	5
Decided not to go to graduate school	8	10
Tried that career, but didn't like it	7	3
Jobs in original career choice were scarce	26	21
Didn't know enough about career alternatives when left college	29	14
N	5,886	95

Satisfaction with Life

Older respondents and those who were married generally seemed to be satisfied with more aspects of life than their younger and single counterparts (Table B-29). Those who were older many be more satisfied and may have more time to achieve their desired aspirations than do younger respondents. The area of life that married respondents were least likely to be satisfied with was the amount of time they had for leisure activities.

Summary and Implications

Having examined the results of the follow-up data, the value of national data on college graduate's educational and career outcomes becomes apparent. Major findings from the data highlighted from this analysis reveal potential inadequacies with traditional colleges and universities dealing with an older clientele. These have led to suggestions about how the situation can be improved so that colleges and universities can attract the needed adult students and so the adult students can achieve their educational and career-related aspirations.

1. The primary reason given by all freshmen for attending college was to get a better job. Institutions wishing to attract adults should place less emphasis on students' personal, intellectual and social development in favor of a more career-centered orientation.

2. The desire for intellectual development and concerns about the job market were important reasons for choosing a college and attending college in the first place. College counselors may not have much of an impact on whether or not adults go to college and which ones they attended, but they can influence students' selection of major fields and curricular paths.

Table B-29

Satisfaction With Various Aspects of Life, by Age
(percentages responding "very satisfied")

Satisfaction With Various Aspects of Life	Age	
	Under 22 Years of Age	Over 22 Years of Age
Life in general	48	51
Family life	53	53
Quality of leisure-time activities	33	33
Amount of time for leisure activities	29	28
Town in which you live	35	41
Geographic area in which you live	47	53
Climate where you live	42	49
Social life	28	30
Future prospects	42	39
N	8,777	132

3. Although all the respondents were generally satisfied with the types of college counseling they received, very few were very satisfied and younger respondents were dissatisfied with the career counseling available to them. This suggests that the quality of counseling services needs to be improved.

4. Intellectual and job-connected benefits were the most widely recognized in considering the usefulness of a college education.

5. Few of the respondents said they would attend different institutions if they were deciding to attend college today and about a third of them said that there was a very good chance that they would change their major fields.

6. College counselors have the most contact with students during their senior years when students become serious about career planning. This is too late though because at least three-quarters of the students had already chosen their careers by their senior years. Counselors should be more available throughout the entirety of the student's college-going years.

7. The college placement office was more helpful to younger than older students in successfully finding them jobs. Perhaps the adult students were not taking advantage of all their colleges could offer them or perhaps the placement effort was not equally geared toward meeting the needs of both a younger and older student population. Or perhaps adults already had jobs and did not require placement services.

8. More of the adult than the traditional-aged respondents said that they were satisfied with their jobs and they tended to stay at their jobs longer than their younger counterparts.

9. Most of the graduates had career plans when they left college. While the career plans of most adults stayed the same, the younger respondents

changed their career plans at least once. Adults were probably already settled into careers whereas younger graduates were still shopping around. Choosing a career however, should be regarded as a continuing process of adjustment and career counselors must constantly encourage alternative career considerations.

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